

Volume 6

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UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

Before The Honorable William H. Alsup, Judge

SONOS, INC.,	)	
	)	
Plaintiff and	)	
Counter-Defendant,	)	
	)	
VS.	)	<b>NO. C 20-6754 WHA</b>
	)	Related Case No. <b>C 21-07559 WHA</b>
GOOGLE, LLC,	)	
	)	
Defendant and	)	
Counter-Claimant.	)	
_____	)	

San Francisco, California  
Friday, May 12, 2023

**TRANSCRIPT OF JURY TRIAL PROCEEDINGS**

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United States District Court - Official Reporter

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7:23 a.m.

P R O C E E D I N G S

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(Proceedings were heard out of the presence of the jury:)

**THE CLERK:** All rise. The court is now in session.

The Honorable William Alsup is now presiding.

**THE COURT:** All right. Be seated.

Good morning. And let's get to work.

The jury is not present, the lawyers are.

I want to have a discussion with you. I read the Google submission, and I need the help of both sides to understand this sequence of events and the legal import of it concerning the -- let me set the stage.

Those of you who have been here day to day know that I have asked in the past about what is it in the specification that supports overlapping zone scenes to be saved and used later, and each time it has come down to one paragraph. So I looked at it, and I can see the argument. I thought the -- it was thin, but I couldn't say it didn't get at the idea.

So I raised the question: Was this in the specification in 2005? And you told me it was, but it's not. It was in something called at best an appendix.

Now, appendices are not published. It doesn't teach the world how to do the invention. But in 2019 for the first time Sonos moved by amendment to the PTO to move that paragraph in

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1 the appendix, which had been concealed from the public, into  
2 the specification. I say "concealed." That may be too strong  
3 a word, but it was something no one would go and look at.

4 So if that's true, wouldn't the Google system be prior art  
5 and invalidate the entire system?

6 All right. I want to hear from Mr. Pak first, and I want  
7 to thank you for doing this excellent work.

8 **MR. PAK:** Thank you, Your Honor.

9 **THE COURT:** And I'm shocked to find out that I'm only  
10 finding this out now for the first time.

11 All right. Go ahead, Mr. Pak.

12 **MR. PAK:** Yes, Your Honor. So I'm just going to state  
13 the facts --

14 **THE COURT:** Tell me this.

15 **MR. PAK:** Yes.

16 **THE COURT:** When was the first time the  
17 specification -- was it published in 2006? How does it work  
18 with the provisional?

19 **MR. PAK:** You know, I don't know the exact date when  
20 this provisional was published, but Counsel for Sonos may.

21 **MR. SHEA:** I don't have the exact date; but,  
22 Your Honor, the provisional with the appendix would have  
23 published and become available to the public on the same day as  
24 the -- the subsequent specification, Your Honor.

25 **THE COURT:** As what?

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1           **MR. SHEA:** The provisional --

2           **THE COURT:** What year was it published?

3                           (Pause in proceedings.)

4           **THE COURT:** All right. You don't know the answer.

5           All right, Mr. Pak, he interrupted you. I want to give  
6 you the floor. I want to learn as much as I can about this --

7           **MR. PAK:** Yes, Your Honor.

8           **THE COURT:** -- in 30 minutes.

9           **MR. PAK:** So, Your Honor, as we've heard throughout  
10 the case, there is this one paragraph --

11           **THE COURT:** Yes.

12           **MR. PAK:** -- it's associated with Figure 5B.

13           **THE COURT:** Yes. But what is the legal significance  
14 of bringing it from the appendix to the specification?  
15 That's -- I -- I have not had this problem before. I just  
16 understand general principles, but I don't understand. What is  
17 the arcane rule in the PTO?

18           **MR. PAK:** I don't know if I know the answer to that  
19 question precisely for our case.

20           On written description, one of the issues that we had was  
21 it wasn't just lifted out of the appendix and put into the  
22 final specification through amendment; but if you go and look  
23 at that original provisional Appendix A, it's associated with a  
24 different figure, which is a hand-held controller user  
25 interface, which that document says "Do not use for managing

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1 zone scenes."

2 That sentence that Counsel and others have been relying on  
3 for written description support of overlapping zone speakers  
4 was actually in that original provisional appendix as  
5 describing zone groups or the prior art technique of doing  
6 dynamic or ad hoc zone groups.

7 They lifted that sentence from that figure, which that  
8 appendix says "Do not use for zone scenes," put it by amendment  
9 next to Figure 5B, replaced "zone group" with "zone scenes."

10 So as far as this case is concerned, Your Honor, we do not  
11 believe there is written description support that goes back to  
12 2006.

13 **THE COURT:** Yes. But -- all right. You see, you slid  
14 off onto something that is important --

15 **MR. PAK:** Yes.

16 **THE COURT:** -- but that tells me that you know  
17 something about the law --

18 **MR. PAK:** Yes.

19 **THE COURT:** -- that -- I'm just focusing on the  
20 paragraph itself --

21 **MR. PAK:** Yes.

22 **THE COURT:** -- which was in an appendix.

23 **MR. PAK:** Yes.

24 **THE COURT:** Was that paragraph faithfully reproduced  
25 from the appendix to the specification in 2017?

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1           **MR. PAK:** No, we do not believe so.

2           **THE COURT:** Well, what is -- how was it forged or  
3 modified?

4           **MR. PAK:** So, Your Honor, let's take a look -- I think  
5 you have the binder.

6           **THE COURT:** No I don't.

7           **MR. PAK:** Oh, you don't. Okay.

8           **THE COURT:** It's in chambers.

9           **MR. PAK:** Yes, Your Honor.

10           And maybe we can bring up -- Mr. Fisher, can you pull up  
11 the provisional application if we have that ready?

12           I can walk Your Honor through what --

13           **THE COURT:** I forgot my --

14           **MR. PAK:** Yes. It's on the screen now, Your Honor,  
15 and I'll walk you through this and see if I can lay out the  
16 facts as we know that.

17           So that paragraph -- this is on -- if you turn to page 17,  
18 which is 4.1 of this provisional -- in the appendix,  
19 Mr. Fisher, so we're looking at Appendix A.

20                           (Pause in proceedings.)

21           **MR. PAK:** So if you go to the appendix, which is --

22           **THE COURT:** What's on the screen now? That looks like  
23 the specification.

24           **MR. PAK:** This would be page 17 in the appendix, which  
25 is towards the back.



## PROCEEDINGS

(Pause in proceedings.)

**THE COURT:** I'm very sorry. I -- I have this big -- I'm going to hand it down. I can't -- I don't have anyone to hand it down to.

**MR. PAK:** Okay, Your Honor.

**THE COURT:** I've got Exhibit 4. I've got Exhibit 6.

**MR. PAK:** Okay. So if Your Honor turns to the provisional, which should be the first document, I believe, in the chain, the priority --

**THE COURT:** What page is -- Exhibit 4; is that right?

**MR. PAK:** No. This is the provisional.

Oh, not the prosecution history, Your Honor. We're looking at the continuation.

**THE COURT:** I -- it's impossible for me to follow it.

**MR. PAK:** Yeah. Let me hand this up to you, Your Honor, please.

**THE COURT:** All right.

(Pause in proceedings.)

**MR. PAK:** I can show it on the ELMO too if that would be helpful for everybody to see.

**THE COURT:** All right. Just a moment.

Okay. What is this? What is this?

**MR. PAK:** This is the provisional -- this is Appendix A to the original provisional document, provisional application, that's going back to 2006.

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1           So this is the document that Sonos has claimed provides  
2 written description support for the overlapping zone scenes  
3 that takes them back to the 2006 provisional filing, and this  
4 is the provisional filing.

5           So they filed this. They attached two appendices.  
6 Appendix A is the one that we're looking at, which is a  
7 modified version of Mr. Lambourne's conception document.

8           **THE COURT:** Okay. But the text does say "Annexed  
9 hereto is Appendix A providing examples to teach and refer to  
10 various features, design," et cetera, et cetera, et cetera.

11           **MR. PAK:** That's right, Your Honor.

12           **THE COURT:** All right. So that is in the  
13 specification.

14           And so did this Appendix A come before or after the  
15 claims? There were no claims.

16           **MR. PAK:** There were no claims. This was 2006, a long  
17 time ago.

18           So if you turn to that page that I showed you, which is  
19 Appendix A, on that document, that little sentence about having  
20 all zone -- zones, do you see that at the bottom -- bottom of  
21 that page, Your Honor?

22           **THE COURT:** No. It says "including the zones that are  
23 already grouped"?

24           **MR. PAK:** That's right. That's the same sentence that  
25 was lifted from this document and put into the patent

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1 specification by amendment as Your Honor noted.

2 That sentence is describing nothing about zone scenes.  
3 This sentence is describing zone groups, which is a -- as we  
4 heard from Sonos, in the prior art Sonos 2005 system, there was  
5 Party Mode and then you had the ability to create dynamic or  
6 ad hoc groups that could not be saved. So this sentence is  
7 talking about groups, not scenes.

8 And the picture that you see with the little controller  
9 UI, Your Honor, that figure that's above that sentence --

10 **THE COURT:** Yes.

11 **MR. PAK:** -- that is not talking about zone scenes.  
12 That's talking about how you add members to groups, dynamic  
13 groups, and you could expand the members of that group by  
14 adding one more speaker or another previously grouped set of  
15 speakers.

16 They took that sentence, which is not about zone scenes,  
17 and we know that because there's another section that we  
18 highlight in the brief that says that -- that controller, the  
19 hand-held controller UI, cannot be used for zone scene  
20 management -- they took that sentence and by amendment in --  
21 much later in time, 2000 whenever the -- 2017-'18 time period,  
22 they took that sentence, they put it in Figure 5B -- next to  
23 Figure 5B. Instead of calling it "zone groups," as was in the  
24 original provisional, they changed it to talk about "zone  
25 scenes."

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1 So --

2 **THE COURT:** All right. Okay. This is important.

3 **MR. PAK:** Yes.

4 **THE COURT:** And I -- you're -- I'm going to come to  
5 this, but I'm looking at paragraph -- column 10 --

6 **MR. PAK:** Yes.

7 **THE COURT:** -- the paragraph near 12 to 17 or 19 that  
8 starts "Figure 5B shows another user interface." Do you see  
9 what I'm saying?

10 **MR. PAK:** Yes. I have that exactly.

11 **THE COURT:** All right. Now, I'm asking: Does that  
12 paragraph appear in the appendix?

13 **MR. PAK:** What we find when we looked is -- if we can  
14 have that on the screen.

15 This is the closest that we found, page -- and for the  
16 record, I'll make a note, page 2651, page 45, is the  
17 provisional document.

18 And, Mr. Fisher, if we can zoom in on the bottom.

19 **THE COURT:** Just a minute. 45?

20 **MR. PAK:** Page --

21 **THE COURT:** I don't know if I'm looking at the right  
22 document.

23 **MR. PAK:** It's on the screen, Your Honor, now. We  
24 have it.

25 Thank you.

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1       So this is what's going on: You have page 45 of the  
2 provisional on the left. You have the --

3           **THE COURT:** It says page 17.

4           **MR. PAK:** Yes. Page 17 in your version, Your Honor.

5           **THE COURT:** All right. So page -- all right. But  
6 it's renumbered.

7       Okay. All right.

8           **MR. PAK:** Okay. So do you see how, Your Honor, it's  
9 got two screenshots? This is the controller UI user interface,  
10 and it says (as read):

11           "List of zones in the screen above includes all the  
12 zones in the system, including the zones that are already  
13 grouped."

14           **THE COURT:** Yeah.

15           **MR. PAK:** If you go to the top, this is talking about  
16 (as read):

17           "Currently as discussed in the introduction of this  
18 document, the current link and drop zones feature allows  
19 the user to link and drop zones one at a time. This  
20 feature would allow the user to link and drop multiple  
21 zones in one screen."

22       So this -- in this Section 4.1, it is not talking about  
23 zone scenes. This is talking about the preexisting zone group  
24 or what we've heard is ad hoc or dynamic group. They took that  
25 sentence and --

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1           **THE COURT:** I get that -- I get that that's what  
2 you're saying.

3           **MR. PAK:** Yes.

4           **THE COURT:** I'm trying to first find out -- it was  
5 represented to me that this exact paragraph was in the  
6 appendix.

7           **MR. PAK:** It's not.

8           **THE COURT:** All right. So I --

9           **MR. PAK:** That is absolutely --

10          **THE COURT:** So I want to go sentence by sentence.

11          **MR. PAK:** Yes.

12          **THE COURT:** Figure 5B shows another -- I know  
13 Figure 5B couldn't be in the appendix, but some figure shows  
14 another user interface to allow a user to form a scene. Is  
15 that sentence anywhere in the appendix?

16          **MR. PAK:** No. I wasn't --

17          **THE COURT:** Are you sure?

18          **MR. PAK:** I'm pretty sure that sentence does not  
19 appear because there's no Figure 5B in this provisional and  
20 it --

21          **THE COURT:** Well, I know that. That wouldn't be fair  
22 to ding them for that because it has to be renumbered.

23          But some figure in the appendix show -- does it say "shows  
24 another user interface to allow a user to form a scene"?

25          **MR. PAK:** I was not able to find that.

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1           **THE COURT:** All right. The next sentence says (as  
2 read):

3           "The user interface 520 that may be displays on a  
4 controller or computing device lists available zones in a  
5 system."

6 Is that sentence in there?

7           **MR. PAK:** I was not able to find that, Your Honor.

8           **THE COURT:** All right. The next one I think is in  
9 there (as read):

10          "The list of zones in the user interface includes all  
11 the zones in the system, including the zones that are  
12 already grouped."

13 Is that in there exactly in those words or is it --

14          **MR. PAK:** If you -- let's blow that up and compare  
15 it -- in comparison.

16 I think that particular sentence appears to be the one  
17 that's at the bottom.

18          **THE COURT:** All right. I think so too.

19 And then next (as read):

20          "A check box is provide" -- I think it means  
21 provided -- "A check box is provide next to each of the  
22 zones so that a user may check in the zones to be  
23 associated with the scene."

24 Is that sentence in the appendix?

25          **MR. PAK:** I was not able to find that one, Your Honor.

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1           **THE COURT:** So I'm going to give you a chance over  
2 there on the Sonos side. Maybe I'm -- not yet. Not yet. But  
3 yesterday you represented to me, I believe, that this paragraph  
4 was in the appendix. All right. Okay. But I'm now learning  
5 maybe it wasn't.

6           All right. Please continue with your -- so you're making  
7 two points. One, this language is not in there; and two, the  
8 diagram has been transmogrified from the original to make it  
9 look -- what used to be "dynamic grouping" has now become  
10 "scenes," but that was not what was in the document.

11           **MR. PAK:** Exactly.

12           **THE COURT:** And, in fact -- and, in fact, the  
13 document, the appendix, said you cannot use or should not use  
14 the controller to do scenes.

15           **MR. PAK:** Exactly right.

16           And the legal significance, Your Honor, for this case, I  
17 don't know what legal significance there may be for other  
18 claims, but if, in fact, the 2006 provisional is not providing  
19 written description support and they're stuck with the  
20 amendment date, which is two, three years after our product was  
21 released --

22           **THE COURT:** Yeah, your product would be --

23           **MR. PAK:** -- it would be invalidated.

24           **THE COURT:** -- prior art. The whole patent would be  
25 invalid, and we would be in the attorneys' fees territory at



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1 this point.

2 **MR. PAK:** That's right.

3 **THE COURT:** All right. I want to give the other side  
4 a chance to respond to what I've just heard.

5 **MR. RICHTER:** Thank you, Your Honor. Cole Richter for  
6 Sonos.

7 First, I'd like -- if this can stay on the screen, that's  
8 fine. Well, okay.

9 Mr. Jay? Okay. Great.

10 So what we see on the left side is a portion of Appendix A  
11 of the provisional; and so this bottom screen here, Your Honor,  
12 that is Figure 5B of the -- of the patent. And I'll hold it up  
13 here, and I can also have our trial technologist put it on the  
14 screen.

15 But this is --

16 **THE COURT:** Yeah, I get that you put it in the bottom  
17 half.

18 **MR. RICHTER:** Well, yes, correct, the bottom half.

19 Let me take a step back and explain the history of the  
20 filing.

21 So the provisional was filed September 2006. The  
22 provisional is -- was -- consisted of what was called a  
23 specification, some drawings, and two appendices. All of that  
24 material is considered the provisional. That was filed with  
25 the Patent Office.

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1           **THE COURT:** Was that published?

2           **MR. RICHTER:** It was published -- it was made  
3 available for inspection when the nonprovisional application,  
4 which claimed priority to it, first published. That published  
5 in 2013 or -- yes, 2013.

6           **THE COURT:** So between 2005 and 2013, if somebody --  
7 was there anything that would have taught the world how to  
8 practice anything? If it wasn't published, how could that be?

9           **MR. RICHTER:** Not taught the world at that time,  
10 Your Honor, but the important thing is that it was filed at the  
11 Patent Office. It was filed at the Patent Office explaining  
12 how to practice the invention, and it was making its way  
13 through the Patent Office until it issued on -- issued as a  
14 patent in the first nonprovisional patent, the '853, patent in  
15 2013.

16           That predates Google's system, for whatever that's  
17 relevant for, predates Google's system.

18           **THE COURT:** All right. And were those appendices  
19 published at that time?

20           **MR. RICHTER:** At that time they were made available  
21 for inspection in the file history available for everyone.

22           **THE COURT:** No, no. Answer my question.

23           Were those appendices published like the patent was  
24 published or -- you're saying "made available for inspection."  
25 That would mean you've got to get on an airline, fly back

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1 there, and ask to see them.

2 **MR. RICHTER:** No. I -- well, that's one way. I think  
3 you could use the internet.

4 So they weren't part of the patent document, the four  
5 corners of the ribbon copy, but they were available to the  
6 public at that time. You can go on the internet and get them.  
7 That's --

8 **THE COURT:** All right. All right. We'll come back to  
9 that point.

10 **MR. RICHTER:** Okay. No problem.

11 So, I mean, we've heard a lot about this sentence, this --  
12 the list at the very bottom of this portion of the  
13 specification (as read):

14 "The list of zones in the screen above includes all  
15 zones in the system, including the zones that are already  
16 grouped."

17 That was the sentence that was added into the  
18 specification.

19 But the important point is: This is the zone scene  
20 specification, Your Honor. Look, it says it at the very top,  
21 "Sonos UI specification zone scenes." The entire document is  
22 talking about zone scenes.

23 **THE COURT:** What entire document? What entire  
24 document?

25 **MR. RICHTER:** The entire Appendix A to the

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1 provisional. This is -- this is talking about zone scenes.

2 This is --

3 **THE COURT:** It's not. It's talking about dynamic  
4 grouping.

5 **MR. RICHTER:** No. This is not talking about dynamic  
6 grouping. This is talking about a modification to the existing  
7 system to allow you to create groups; and when you're creating  
8 groups, you're displaying all of the zones that -- even if  
9 they're already in existing groups.

10 At the time it is correct that the Sonos '05 system did  
11 not allow -- did not display screens like this. This is a  
12 proposed modification to the Sonos '05 system.

13 This is -- this document -- this section is in the context  
14 of a zone scene specification describing different ways to  
15 create and invoke zone scenes.

16 And, yes, it's correct, Mr. Pak pointed out that the  
17 document also says at page 39 -- 37 that it is not expected  
18 that the zone scenes should be set up using a hand-held  
19 controller. It didn't say not impossible to do that. This is  
20 describing many different ways to create and invoke zone  
21 scenes, and this particular way is a modification of the zone  
22 picker screen.

23 And let me now address the addition of this sentence into  
24 the specification.

25 First of all, this sentence is not the only support for

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1 overlapping groups. Okay? It's -- I'll come back to that in a  
2 second.

3 **THE COURT:** I've read it. I can only find one other  
4 arguable place where there's a reference to a den being in the  
5 morning and the evening, but that's clearly dynamic. It's  
6 talking dynamic. Nothing about zone scenes in that paragraph.

7 **MR. RICHTER:** I'm happy to -- yeah. I'm happy to  
8 address all the other places in the 2007 specification that --

9 **THE COURT:** There's none. There's none. I've looked  
10 at it, but I'll give you a chance to -- I'm going to give you a  
11 chance to, but I've read it quite carefully for this. I'd be  
12 surprised if I missed something where overlapping zone scenes  
13 and the nature of this can be -- all right.

14 We've got to bring the jury in in a minute. I want -- I  
15 keep interrupting you. So, please, I want to give you equal  
16 time, please.

17 **MR. RICHTER:** Okay. Thank you. No problem,  
18 Your Honor.

19 Let me briefly address the fact that the sentence was  
20 added to the specification in 2019. This is a perfectly  
21 permissible procedure. It's provided by Rule 37 CFR 1.57(g) --

22 **THE OFFICIAL REPORTER:** I'm sorry?

23 **MR. RICHTER:** I'll slow down just a little bit.

24 What I just mentioned was the Code of Federal Regulations.  
25 That's 37 CFR 1.57(g), and that says (as read):

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1 "Any insertion of material incorporated by reference  
2 into the specification or drawings of an application must  
3 be by way of an amendment to the specification or  
4 drawings. Such an amendment must be accompanied by a  
5 statement that the material being inserted is the material  
6 previously incorporated by reference and that the  
7 amendment contains no new matter."

8 That's exactly what happened.

9 **THE COURT:** Well, yours did -- yours did include new  
10 matter.

11 **MR. RICHTER:** No. That matter was in the 2006  
12 provisional and it was incorporated by reference into the 2007  
13 nonprovisional filing.

14 **THE COURT:** It's not word for word.

15 **MR. RICHTER:** That sentence --

16 **THE COURT:** The first two sentences?

17 **MR. RICHTER:** Well, the --

18 **THE COURT:** The first two sentences in that paragraph  
19 by Mr. Pak says that they're not in. He couldn't find them.

20 **MR. RICHTER:** Well, it is correct that not every word  
21 of the 2007 nonprovisional needs to be in the 2006 provisional,  
22 but the portion of the material that we were bringing in by way  
23 of amendment was. That's what the rule says. That's the part  
24 that was brought in.

25 Figure 5B was in the provisional, and this portion of the

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1 2007 nonprovisional is describing Figure B. The part that was  
2 brought in by amendment is the portion describing Figure B that  
3 says (as read):

4 "The list of zones in the user interface 520" -- that  
5 was Figure 5B, which was referred to as the screen above  
6 here -- "includes all the zones in the system, including  
7 the zones that are already grouped."

8 This amendment was made August 2019 during the --

9 **THE COURT:** Let's say that I determine that you're  
10 wrong and this is new material or some of it is new material.  
11 That new material cannot support a priority date of 2005.  
12 Isn't that true if it's new material?

13 **MR. RICHTER:** If it's -- if it's new material, then  
14 I -- I think the -- what would happen is that that sentence  
15 would then just be struck from the specification. The entire  
16 specification just doesn't go away, Your Honor.

17 **THE COURT:** Of course. I agree with that. And so if  
18 it's new material and it's not considered and this is the only  
19 thing that would support the invention, then the written  
20 description is no good, the patent is no good or -- and then  
21 Mr. Pak is going to ask for a lot of attorneys' fees.

22 **MR. RICHTER:** Well, this --

23 **MR. SHEA:** Your Honor, may I just clarify one thing?

24 **THE COURT:** Sure.

25 **MR. SHEA:** Because I think there's still a little bit

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1 of confusion. I know it's a confusing -- it is, actually, a  
2 very confusing priority chain. I've seen a lot, and it's  
3 confusing.

4 So I think one thing that's getting overlooked here is  
5 there's the provisional, and that was filed in 2006. Then  
6 there was the first nonprovisional filing. That happened in  
7 2007, and that is -- other than this sentence and a couple  
8 other figures, that is the operative -- that's the exact  
9 specification that we're looking at today.

10 So Your Honor has asked a couple times about the rest of  
11 the sentences in that paragraph. Those all were filed with  
12 the -- for the first time 2000 -- verbatim 2007,  
13 September 2007.

14 So that -- that material -- what happened was that was the  
15 original specification.

16 **THE COURT:** Wait, wait. You're saying Figure 5B was  
17 in 2007?

18 **MR. SHEA:** That's right, Your Honor. That's right.

19 **THE COURT:** He said it was 2017.

20 **MR. SHEA:** Yeah, that's absolutely incorrect.

21 **THE COURT:** That's not true?

22 **MR. SHEA:** Yeah, that's absolutely incorrect.

23 **THE COURT:** Incorrect or correct?

24 **MR. SHEA:** Incorrect. Yeah, incorrect.

25 2007 filing Sonos -- because the way this works,



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1 Your Honor, is you -- you file the provisional first, as I tell  
2 my clients to placeholder, it's to get your filing date; and  
3 then you file your nonprovisional patent a year later, and you  
4 have to. You get one year; right? Once you file a  
5 provisional, you get one year to file a nonprovisional patent.

6 So we went and filed the first patent in this chain, the  
7 first real patent in this chain, not a provisional but the  
8 nonprovisional, in 2007, and Figure 5B and -- and this  
9 paragraph, other than the one sentence we're talking about,  
10 were verbatim in that specification.

11 The only thing that wasn't, for purposes of this  
12 discussion at least, is this one additional sentence, and that  
13 one additional sentence had already been part of the  
14 provisional.

15 **THE COURT:** I'm sorry. Which sentence are you  
16 referring to?

17 **MR. SHEA:** Yeah, sorry. The one that says "all zones,  
18 including the zones that are already grouped."

19 So --

20 **THE COURT:** Well, but that -- that's only half. The  
21 full sentence says (as read):

22 "The list of zones in the user interface includes all  
23 zones in the system, including the zones that are already  
24 grouped."

25 **MR. SHEA:** That's right, Your Honor.

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1           So what happened was this; right? In 2007 the  
2           specification had Figure 5 -- that was filed in 2007, what I  
3           like to refer to as the first nonprovisional application, that  
4           was filed September 2007. It had Figure 5B. That's --

5           **THE COURT:** That very same Figure 5B?

6           **MR. SHEA:** Exactly that 5B.

7           **MR. PAK:** That's wrong, Your Honor.

8           **THE COURT:** Okay. I'm going to give you a chance,  
9           Mr. Pak. I want to hear counsel's statement.

10          Please continue.

11          **MR. SHEA:** So my understanding, Your Honor -- and  
12          we'll double-check it again, because, I mean -- but my  
13          understanding is that Figure 5B was in that filing.

14                               (Pause in proceedings.)

15          **MR. SHEA:** And, Your Honor, and this paragraph, other  
16          than that sentence, was part of that filing.

17          **THE COURT:** All right. Well, that would make some  
18          difference to me if that's true.

19          Mr. Pak, I give you a short rebuttal.

20          **MR. PAK:** Yes. So here's the problem: Let's go back  
21          to the provisional where that sentence first appeared.

22          If we look at this, they -- whether it's in an earlier  
23          figure -- nonprovisional filing or not, do you see, Your Honor,  
24          there's an arrow that goes from the top figure to the bottom  
25          figure? Do you see that, Your Honor?

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1           **THE COURT:** Yes.

2           **MR. PAK:** That -- what this means is that this is the  
3 entire figure. The top figure and the bottom figure are linked  
4 together. Why is that important? Because you can see that the  
5 menu that's on the bottom is a result of pushing this zone  
6 scene -- zones linking button. And at the top you have three  
7 speakers "living room, kitchen, and patio, one group; master  
8 bedroom, an individual speaker.

9           And then you push the zones linking button, and it tells  
10 you these are the other things you can group together with that  
11 selection.

12           And then that sentence that we've been talking about, "The  
13 list of zones in the screen above includes all the zones in the  
14 system, including the zones that are already grouped," is with  
15 respect to this bottom figure.

16           And what you see here, sir, is this is adding to an  
17 existing dynamic group the ability to expand or shrink that  
18 group by putting not only individual speakers or other groups.

19           What that means is you will never have in this full  
20 picture a scenario where you have overlapping -- even  
21 overlapping zone groups. You can shrink a group. You can make  
22 it bigger.

23           But by chopping off the top of this figure where this  
24 provisional says "Don't use this for zone scenes," and you can  
25 see that this has -- zone linking is a separate button and on

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1 the right you can see that this is talking about zone menu, you  
2 push that button, it takes you to the zone menu. This is zone  
3 grouping, the dynamic zone grouping, that's prior art.

4 **THE COURT:** All right. Look, you've made this point  
5 earlier.

6 But what Counsel is saying that you're dodging and sliding  
7 off onto something else -- wait a second -- is -- is -- I'm  
8 looking at column 10 where it begins "Figure 5B shows another,"  
9 he says that whole paragraph, with one exception of one  
10 sentence use --

11 **MR. SHEA:** Yes.

12 **THE COURT:** -- came in in 2007.

13 **MR. SHEA:** That's right, Your Honor. I mean, I'm  
14 holding up this is the 2007 5B right here. It's identical to  
15 the 5B in that -- in the --

16 **THE COURT:** You said the whole paragraph was  
17 identical.

18 **MR. SHEA:** Yeah, well, I'm sorry. You had asked me  
19 earlier about 5B, and the paragraph -- and we can find that too  
20 for Your Honor -- everything but the one sentence is in 2007.

21 **THE COURT:** Is that true?

22 **MR. PAK:** The Figure 5B, which is a chopped-off  
23 version of this, does appear in the first nonprovisional  
24 application, I agree with that.

25 The thing that is missing, which is critical to the

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1 overlapping zones issue, is this sentence because that  
2 Figure 5B without that sentence does not get to overlapping  
3 zone scenes. So that that sentence -- this Figure 5B and that  
4 sentence does not appear in the first patent application.

5 **THE COURT:** Well, when was that sentence added?

6 **MR. PAK:** That's the list of zones in the user  
7 interface 520, including all zones in the system.

8 **THE COURT:** I understand, but when was the sentence  
9 added to the spec?

10 **MR. PAK:** I believe for the purposes of these two  
11 patents, it was added by amendment in 20 -- was it '18?

12 **MR. RICHTER:** Well, it was technically in the  
13 specification since the provisional, which was 2006. It was  
14 added into the four corners of the specification for purposes  
15 of printing in 2019 --

16 **MR. PAK:** '19.

17 **MR. RICHTER:** -- and the applicant explained in that  
18 amendment that it was adding it pursuant to Rule 57(g), and the  
19 examiner said permissible and then allowed the application,  
20 Your Honor. This is a perfectly permissible practice to  
21 amend --

22 **THE COURT:** I may disagree with you and the examiner,  
23 but I'm not -- I'm not there yet.

24 **MR. RICHTER:** Understood.

25 **THE COURT:** Lots of things get through the PTO that --

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1 because you know how busy they are. They're busier than even a  
2 district judge, and so I'm -- and they may not have understood  
3 the significance of it and the priority dates and leaving to  
4 the judge later to figure out does this sentence count for  
5 purposes of a 2005 priority or for purposes of a 2018 priority.  
6 If it's 2018, then maybe the Google system predates your whole  
7 thing and your patent is invalid. Maybe.

8 **MR. SHEA:** So, Your Honor --

9 **THE COURT:** But just a second.

10 You led me to believe, Mr. Pak, that 5B came in in 2018.

11 **MR. PAK:** I apologize if that was the impression. I'm  
12 talking about 5B with that sentence. 5B with that sentence.  
13 Without that sentence, 5B does not get you to overlapping zone  
14 scenes. That sentence is critical to understand how you go  
15 from Figure 5B.

16 **THE COURT:** All right. We've got -- is the jury  
17 ready?

18 **THE LAW CLERK:** Yeah.

19 **THE COURT:** All right. Hang on a minute.

20 I want additional briefing.

21 **MR. PAK:** Thank you.

22 **MR. SHEA:** Thank you, Your Honor.

23 **THE COURT:** I want to know -- and I want it by Sunday  
24 night at 5:00 p.m., not 8:00 p.m., and I -- and I want to  
25 understand the legal significance of an appendix: Is it part

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1 of the specification? What does it mean?

2 The priority date -- there's, in my mind, a 50-50 chance  
3 that these patents are invalid because the Google system  
4 predated them because it was inadequate written description  
5 prior to that date, and that's the very reason you snuck it in  
6 there.

7 That's my suspicion. You're sitting around the conference  
8 room there at the Sonos saying "How can we -- we don't have a  
9 good enough description. Maybe we better -- let's move this  
10 in."

11 Now, maybe -- maybe the law is, "Oh, no, this counts as  
12 part of the appendix. It counts." But, to my mind, the whole  
13 point of the written description is to teach the world how to  
14 do it. If you have to go find something in some appendix  
15 that's online, that's crazy. What a crazy way to run a system.

16 So I -- I feel like there's a significant written  
17 description issue here with respect to the claims in suit. Do  
18 not slide off of that. I want to know case law that deals with  
19 appendixes priority dates laid it out.

20 **MR. PAK:** Thank you, Your Honor.

21 **THE COURT:** Now, I want to know something. Was there  
22 anything else in 2018 or '19 that was snuck into the  
23 specification? Even one word I want to know.

24 **MR. PAK:** I'll go back and check. I don't know.

25 **MR. SHEA:** I can address that, Your Honor. I know the

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1 answer to your question. There were -- there were  
2 additional -- two additional figures that were also brought in  
3 from the provisional.

4 **THE COURT:** Which ones?

5 **MR. SHEA:** They were Figures 7 and 8, Your Honor.

6 **THE COURT:** All right. Okay. And were there anything  
7 else?

8 **MR. SHEA:** The descriptions of those figures in the  
9 specification.

10 **THE COURT:** What else?

11 **MR. SHEA:** I believe that is the extent of it.

12 **THE COURT:** Was the word "scene" somehow snuck in  
13 there several times?

14 **MR. SHEA:** Your Honor, the word "scene" has been in  
15 2006, 2007, both.

16 Again, Your Honor, I want to -- so, to be clear, again,  
17 the specification that was filed in 2007 --

18 **THE COURT:** Was the word "scene" snuck in any  
19 additional times? I know it was in the original sometime. Was  
20 there any additional place where the word "scene" was snuck in?

21 **MR. SHEA:** I don't -- we'll double-check, Your Honor.  
22 In describing those figures, it's possible the word "scene" was  
23 used.

24 **THE COURT:** All right. Well, I'd like to know that.

25 **MR. SHEA:** Okay.



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1           **THE COURT:** It's possible -- I have a feeling it's  
2 more than possible because that's what -- that's the gimmick  
3 that was going on at Sonos to cover the Google product.

4 All right. Bring in the jury.

5 Who is our witness?

6           **THE CLERK:** All rise for the jury.

7 (Proceedings were heard in the presence of the jury:)

8           **THE COURT:** Be seated, please.

9 All right. We are starting three minutes late. My  
10 apologies.

11 We still have Dr. Almeroth on the stand.

12                   **KEVIN ALMEROOTH,**

13 called as a witness for the Plaintiff, having been previously  
14 duly sworn, testified further as follows:

15           **THE COURT:** Where are we? Are we on direct or still  
16 on cross? I think we're on direct, aren't we?

17           **MR. SHEA:** Your Honor, yeah, I had just been to the  
18 end of my redirect actually.

19           **THE COURT:** All right. So is there any recross?

20           **MR. PAK:** Are you at the end?

21           **MR. SHEA:** Your Honor, yeah, so I was -- I had not  
22 quite finished; but for the record, in the interest of time,  
23 I'm finished with my redirect.

24           **THE COURT:** All right.

25           **MR. PAK:** Okay, Your Honor, I have some recross. It

**ALMEROOTH - RECROSS / PAK**

1 won't be very long, though.

2 **RECROSS-EXAMINATION**

3 **BY MR. PAK:**

4 **Q.** Good morning, Doctor.

5 **A.** Good morning.

6 **Q.** All right. So, Doctor, I want to tell you I didn't want  
7 to put you on the spot the other day about the prosecution  
8 history statements that you may not have seen recently, but you  
9 do agree with me that looking at the prosecution history  
10 statements as part of the record of the patent is important in  
11 thinking about what the claims cover and what the claims do not  
12 cover in a patent? Would you agree?

13 **A.** It is important to look. To the extent it has any bearing  
14 or not, that's one of the determinations.

15 **Q.** Thank you.

16 Now, doctor, I want to go back to some of the testimony  
17 that you gave on redirect yesterday.

18 **MR. PAK:** So, Mr. Fisher, if we could put up trial  
19 transcript 929, 5 through 17.

20 **BY MR. PAK:**

21 **Q.** So this is for the jury's benefit, you were asked (as  
22 read):

23 **"QUESTION:** So can you explain to us what action causes  
24 the accused Google products and the ones that are accused  
25 of infringement to go into group mode?

1       **"ANSWER:** That's where you would do a launch and that --  
2       and the launch would invoke the group in the Google  
3       system."

4       Do you recall that testimony?

5       **A.** I do.

6       **Q.** And so just for everyone's benefit, launch is a command  
7       inside of the Google system; is that correct?

8       **A.** It is. It's a command. It's a message that gets sent to  
9       the players.

10      **Q.** And we saw that each of the claims talk about invoking a  
11      group or a zone scene in some of their claim elements. Do you  
12      recall that?

13      **A.** I do.

14      **Q.** Yes. So what you were doing was you were mapping the  
15      launch command in the Google system to the invocation of the  
16      zone scenes as required by some of the claim elements that  
17      we've seen so far; is that fair?

18      **A.** Not quite.

19      **Q.** Is it your -- is it true, sir, that the launch process in  
20      the Google products you believe invokes the accused zone scene  
21      in the Google products? Is that a fair statement?

22      **A.** Not exactly. The launch command has multiple uses, and so  
23      one of the uses is with respect to launching the group --

24      **Q.** Thank you.

25      **A.** -- launching the zone scene.

1 Q. And launch, again -- so I understand that. Thank you very  
2 much.

3 The launch can be used to do other things; but in this  
4 particular scenario, you analyzed for purposes of infringement  
5 the launch command is used to invoke the claimed zone scene in  
6 the Google products; is that fair?

7 A. The invocation was accomplished with a launch function.

8 Q. Thank you.

9 So just to remind the jury, what we're seeing on the  
10 screen when we're operating the Home app -- this is a  
11 controller -- let's put up your Demonstrative PDX2.50.

12 (Pause in proceedings.)

13 MR. PAK: And I believe it's -- is this 50? There's a  
14 slide called "Google's Speaker Group Technology Slide,"  
15 I believe.

16 (Pause in proceedings.)

17 MR. PAK: Give us a few seconds. I'm going to get  
18 Mr. Fisher on the right page, Your Honor.

19 (Pause in proceedings.)

20 MR. PAK: Okay. We have it on the screen now.

21 BY DEFENSE COUNSEL:

22 Q. Do you recall discussing the launch function within the  
23 Google products using these series of screenshots?

24 A. I do.

25 Q. So what's happening here is the user pushes the morning

## ALMEROOTH - RECROSS / PAK

1 group with the button on the right; correct? That's the  
2 finger?

3 A. Yes.

4 Q. And then that would launch the morning group. And then  
5 you see the picture to the right? Is that fair?

6 A. I believe that's a decent high-level summary.

7 Q. Right. So what you were saying is the user pushes the  
8 button on the right next to morning; and then somewhere in the  
9 system, a launch command would be used to invoke the morning  
10 group in the Google system. Would you agree?

11 A. That's close. That's not quite how I would describe it.

12 Q. Please. Please describe what you're describing with  
13 these.

14 A. Sure. So the idea is that in the source code there's  
15 functionality that when you invoke the group, it causes a  
16 launch command to be sent to the group leader; and then from  
17 there, that will invoke the group so that it meets the rest of  
18 the limitations with respect to playing -- to be configured to  
19 play in synchronization.

20 Q. Thank you. Perfect.

21 So now, Doctor, I want to now help the jury by figuring  
22 out what the dispute is between you and Dr. Schonfeld on this  
23 issue.

24 So if we put up claim 1 of the '885 patent.

25 Now, I'm using PDX2.10. That's the slide that you used to

1 talk about claim 1; is that correct?

2 **A.** I did use that slide.

3 **Q.** Okay. So here, if we focus on the language saying  
4 "continuing to operate in the standalone mode until given one  
5 of the first and second zone scenes has been selected for  
6 invocation." Can you see that in the claim?

7 **A.** Yes, I can.

8 **Q.** Can you identify for the jury which number we're looking  
9 at?

10 **A.** 1.8.

11 **Q.** Okay.

12 **MR. PAK:** So, Mr. Fisher, if you can highlight that.

13 (Pause in proceedings.)

14 **BY MR. PAK:**

15 **Q.** So 1.8 of claim 1 of the '885 patent has this language of  
16 "continuing to operate in the standalone mode until a given one  
17 of the first and second zone scenes has been selected for  
18 invocation"; correct?

19 **A.** That's what it says.

20 **Q.** So you and I would agree that in order to meet this  
21 limitation, whatever you're accusing has to be in standalone  
22 mode and continue to operate in standalone mode until a given  
23 one of the first and second zone scenes has been selected for  
24 invocation; correct?

25 **A.** That's correct. And this is the claim that's already been

1 found to be infringed.

2 Q. Now with respect to the new design; correct?

3 A. That's correct.

4 Q. And we're talking about the new design for the '885  
5 patent; correct? For the jury's benefit?

6 A. I think that's the first time you said you were talking  
7 about the redesign.

8 Q. Okay. Talking about the new design, Dr. Almeroth, the  
9 jury is going to decide whether this limitation is still  
10 satisfied in the new design of the Google products. Do you  
11 understand that?

12 A. Yes, I do.

13 Q. So the disagreement that is happening between you and  
14 Dr. Schonfeld and Google is that Dr. Schonfeld and Google have  
15 taken the position that this invocation process which uses the  
16 launch command is happening not in a mode other than standalone  
17 mode. Do you understand that?

18 A. I think there was a double negative in there.

19 THE COURT: Yeah. You've got to rephrase it. Double  
20 negatives.

21 BY MR. PAK:

22 Q. You understand that Dr. Schonfeld and Google dispute that  
23 Google speakers are in standalone mode when the launch command  
24 is invoked? Do you understand that?

25 A. Yes.

1 Q. Okay.

2 A. I understand that's what Dr. Schonfeld says.

3 Q. That's what the jury has to decide. The jury has to  
4 decide when the invocation of the zone scenes that you say is  
5 the Google group, the static groups, in the new design, whether  
6 that is happening in standalone mode or a different mode other  
7 than the standalone mode. Do you understand that? That's the  
8 jury's decision?

9 A. That's close. Some of the first words you used with  
10 respect to I think you said dynamic group, I would disagree;  
11 but it is -- it is a question of whether or not at the time of  
12 invocation, the first zone player is continuing to operate in  
13 standalone mode.

14 Q. Thank you.

15 And if the jury were to agree with Google and  
16 Dr. Schonfeld that this invocation step or functionality in the  
17 new design for the Google product is happening in a mode other  
18 than standalone mode, if the jury agrees with that, then you  
19 would agree that there is no infringement of claim 1 of the  
20 '885 patent for the new design; correct?

21 A. I think if they agree with Dr. Schonfeld, then there's not  
22 going to be infringement for the redesign.

23 Q. That's right. Because the infringement test is an  
24 all-or-nothing test. You have to have every element of that  
25 claim; correct?



1     **A.**    That's correct.

2     **Q.**    And we're going to do the same exercise now with the '966  
3     patent.

4             **MR. PAK:**   If we can have claim 1 of the '966 patent.

5                     (Pause in proceedings.)

6     **BY MR. PAK:**

7     **Q.**    And here, your testimony we went through a lot of  
8     exchanges you and I, but one thing you said during the  
9     hearing -- or the transcript last time is that the requirement  
10    here isn't for continuously staying in standalone mode, but at  
11    each one of the steps it has to be in standalone mode. Do you  
12    recall that testimony?

13    **A.**    I do.

14    **Q.**    And you stand by that; correct?

15    **A.**    I do.

16    **Q.**    So for every one of these steps, 1.5 through 1.10, those  
17    steps have to be taken while the zone player is in standalone  
18    mode. Do you agree?

19    **A.**    For each of those steps, that's correct.

20    **Q.**    That's right.

21             So now I want to focus on the specific limitation now.

22    It's the same dispute, whether the group is invoked or  
23    launched, but I want to find the claim language that the jury  
24    has to consider to decide the question of infringement for this  
25    claim on the new design as well.

## ALMEROTH - RECROSS / PAK

1           So if we look at "receiving a third request to invoke the  
2 first zone scene," that is in this claim 1 of the '966 patent;  
3 correct?

4   **A.**    So you had a big run-up to the question, and I disagree  
5 with your characterization.

6   **Q.**    Let me ask the simple question. "Receiving a third  
7 request to invoke the first zone scene," that appears in this  
8 claim as a limitation; correct?

9   **A.**    That is a limitation.

10   **Q.**   And for the jury's benefit, that's 1.10 in Dr. Almeroth's  
11 demonstrative for claim 1 of the '966 patent; correct?

12   **A.**    That's correct.

13   **Q.**    So, again, you say this step 1.10 happens in the accused  
14 Google devices when the Google speaker is in standalone mode;  
15 correct?

16   **A.**    That's correct, in both the older versions and in the  
17 redesign.

18   **Q.**    And you understand that Google and Dr. Schonfeld dispute  
19 that with respect to the new design; correct?

20   **A.**    I do.

21   **Q.**    They say that invocation launch command happens in a mode  
22 other than standalone mode in the accused new design for  
23 Google. Do you understand that?

24   **A.**    I do, but there's a different requirement than that  
25 characterization.

## ALMEROOTH - RECROSS / PAK

1 Q. I'm just asking you: There's a dispute on this limitation  
2 1.10; correct?

3 A. There's a dispute -- yes, there's a dispute on this  
4 limitation.

5 Q. If the jury were to agree with Dr. Schonfeld and Google  
6 that the invocation or launching of the accused groups in the  
7 new design takes place in a mode other than standalone mode,  
8 then this limitation 1.10 would not be satisfied; correct?

9 A. No, actually, this limitation is different. The receiving  
10 a third request to invoke the first zone scene is on the  
11 controller so it's not the invocation yet. That happens in  
12 1.11 where based on the request, the zone player transitions.

13 Q. I'm going to --

14 A. This -- this part that you have highlighted, "receiving a  
15 third request," is receiving a third request into the  
16 controller and then the controller takes action.

17 Q. I want to read --

18 A. So when the request is received at the controller, that's  
19 when it has to be in standalone mode, not after invocation.

20 Q. I want to bring up your trial transcript page 844, 1  
21 through 3.

22 (Pause in proceedings.)

23 **BY MR. PAK:**

24 Q. This is what you stated under oath that you confirmed  
25 today (as read):

**ALMEROOTH - RECROSS / PAK**

1 "The requirement here isn't for continuously staying  
2 in standalone mode, but at each one of the steps it has to  
3 be in standalone mode."

4 You stand by that testimony; correct?

5 **A.** Absolutely.

6 **Q.** Okay.

7 **A.** It's what I just described.

8 **Q.** But, again, if they -- if the jury agrees with  
9 Dr. Schonfeld and Google on this issue of when and which mode  
10 the launching takes place, then there will be no infringement;  
11 correct?

12 **A.** I disagree.

13 **Q.** Okay. We'll see about that.

14 Now, just quickly --

15 **MR. PAK:** You can take this down, Mr. Fisher.

16 **BY MR. PAK:**

17 **Q.** One of the other topics that you discussed on redirect  
18 with counsel was you said that Sonos kept some of its -- or all  
19 of its source code for the Sonos 2005 prior art system because  
20 they didn't want anyone to find out the inner workings or  
21 details of that system; correct?

22 **A.** No, that was not my testimony.

23 **Q.** You understand that the source code was kept confidential  
24 by Sonos for the Sonos 2005 prior art system; correct?

25 **A.** I believe that's correct.

## ALMEROOTH - RECROSS / PAK

1 Q. Okay. But in this case both you and Dr. Schonfeld had the  
2 opportunity to look at the actual operation of the Sonos 2005  
3 prior art system by doing product testing; correct?

4 A. Yes, we both did testing of the Sonos 2005 -- no. I don't  
5 recall. I don't remember if there was actually a setup for the  
6 Sonos 2005 system.

7 Q. You are aware that Sonos did not submit to the Patent  
8 Office for inspection or examination an actual working version  
9 of the Sonos 2005 prior art system; is that correct?

10 A. I don't think they did because there's not a mechanism to  
11 even do that.

12 Q. Are you an expert in patent prosecution procedures?

13 A. No, but I know that much.

14 Q. You're not aware of interviews taking place with patent  
15 examiners to display and explain workings of prior art systems?  
16 You're not aware of that?

17 A. I'm aware of that. I'm not sure that it's applicable to  
18 this situation.

19 Q. You also heard Mr. Millington testify that there were lots  
20 of tests that were conducted of the Sonos 2005 prior art  
21 system. Do you recall that? By Sonos.

22 A. Not specifically, but that makes sense.

23 Q. Makes sense, right, because you would want to test a  
24 product before you release it? After you release it, you want  
25 to test it to see if there are any bugs or if there's

## ALMEROOTH - RECROSS / PAK

1 opportunities for improvement? Do you agree?

2 **A.** Yes, you would want to do testing.

3 **Q.** And you're also aware that none of those test results  
4 regarding the Sonos 2005 prior art system was submitted to the  
5 United States Patent and Trademark Office with respect to these  
6 two patents; correct?

7 **A.** Not that I recall. I don't think that would have added  
8 anything to what the Patent Office already had.

9 **Q.** And you and Dr. Schonfeld had the opportunity to study the  
10 source code for the Sonos 2005 system; is that correct?

11 **A.** I believe that's correct.

12 **Q.** And, again, that source code was kept confidential by  
13 Sonos so it was not submitted to the examiner at the United  
14 States Patent Office for these two patents; correct?

15 **A.** Not the source code but the details of how the system  
16 would have operated.

17 **Q.** Well, what was submitted were just user manuals; correct?

18 **A.** I wouldn't call them just user manuals. They go into  
19 significant detail about how the system works.

20 **Q.** We'll talk about that when you're back up on the stand in  
21 the validity side of the case.

22 But you agree with me that the things that were submitted  
23 about the Sonos 2005 system to the Patent Office were user  
24 manuals of that system; correct?

25 **A.** They were.

1 Q. Thank you.

2 One last question -- set of questions.

3 MR. PAK: If we can put up DDX4.9.

4 BY MR. PAK:

5 Q. You understand that this is the agreed-upon construction  
6 of zone scene; correct?

7 A. Let me check.

8 Q. It's on the screen as well.

9 A. It is. I just want to make sure all the words were there.  
10 Sometimes words get left out.

11 (Witness examines document.) Yes.

12 Q. Okay. And what this construction or definition says is  
13 "previously saved grouping of zone players according to a  
14 common theme." Do you see that?

15 A. I do see that.

16 Q. And this grouping of zone players, according to a common  
17 theme has to be previously saved; correct?

18 A. It is.

19 Q. So one of the things that's required to be previously  
20 saved is the grouping of zone players; correct?

21 A. No. That's not what previously saved talks about with  
22 respect to previous. That's -- it's kind of a mistake that I  
23 made. You can't save something before it's created. So the  
24 previously saved grouping is with reference to the invocation  
25 of the group. You have to have it saved before you invoke it.

## ALMEROOTH - RECROSS / PAK

1 Q. We're going to come back to that later.

2 Let's take out the word "previously." Let's just talk  
3 about saved. Are you with me? What is being saved?

4 A. The -- the zone scene.

5 Q. And that -- the thing that you are saving as a zone scene  
6 has to include the grouping of zone players according to this  
7 construction. Do you agree?

8 A. I disagree.

9 Q. Okay. The language here is grouping of zone players,  
10 correct, for zone scene?

11 A. Yes.

12 Q. You have to save it at some point?

13 A. The grouping of zone players --

14 Q. Yes or no, please.

15 A. I can't answer that yes or no.

16 Q. Okay.

17 A. I don't think that's a fair question.

18 Q. You would at least agree with me that these words appear  
19 in the construction of zone scene, "previously saved grouping  
20 of zone players according to a common theme"; correct?

21 A. That's what the words are.

22 Q. A grouping of zone players includes the identification of  
23 which zone players belong to a grouping; correct?

24 A. It can but it need not be the thing that's saved.

25 Q. Grouping. I'm just focusing on grouping of zone players



## ALMEROOTH - RECROSS / PAK

1 includes the identification of which zone players belong to  
2 that grouping. Agreed?

3 **A.** I think you're misreading the requirement here. I think I  
4 can explain why I think that.

5 **Q.** We'll have a chance to talk later in the case.

6 **THE COURT:** No. I'd like to hear --

7 **MR. PAK:** Sure.

8 **THE COURT:** I'd like to hear this.

9 Go ahead. Please explain your point.

10 **THE WITNESS:** Yes, sir. Thank you.

11 So it's describing previously saved with respect to the  
12 zone scene. So the previously saved is modifying the entire  
13 rest of the limitation, which is the zone scene itself.

14 This doesn't say that previously saved has to include the  
15 identification of the zone players. So one of the examples  
16 could be that on each of the players you save what groups that  
17 player is in, and so that would include things like the  
18 identification for the zone scene and then also the name of the  
19 zone scene; and if all of the players store that information,  
20 then the zone scene can be created based on those players  
21 knowing.

22 And so the invocation happens. You send out the launch  
23 and everyone can see the -- sorry -- everyone can see the  
24 launch; and if they are part of that zone scene, then they  
25 invoke the zone scene.

**ALMEROOTH - RECROSS / PAK**

1           So I don't think it's a requirement even with this --  
2       within this agreed construction that you have to exactly store  
3       every member of the group in a certain location.

4       **BY MR. PAK:**

5       **Q.**    You understand that's a dispute between you and  
6       Dr. Schonfeld; correct?

7       **A.**    I think it's part of the dispute.

8       **Q.**    Dr. Schonfeld says based on this plain language previously  
9       saved grouping of zone players according to a common theme,  
10      what you're saving is the identification of zone players? You  
11      understand that's Dr. Schonfeld's position?

12      **A.**    Yes. And even if you take that position --

13      **Q.**    Doctor, that's all I'm asking.

14      **A.**    -- it's still saved.

15           Well, I'm trying to finish my answer.

16      **Q.**    Please go ahead.

17      **A.**    Even if Dr. Schonfeld and I disagreed on that point, I  
18      still believe the accused products store the group of zone  
19      players.

20      **Q.**    But just on the claim application or interpretation issue,  
21      there is a dispute between you and Dr. Schonfeld as to whether  
22      the grouping of zone players in the zone scene definition  
23      requires identification of the zone players that belong to the  
24      group; correct?

25      **A.**    I think you're rephrasing the disagreement. I think the

## PROCEEDINGS

1 disagreement may be with respect to what has to be previously  
2 saved, whether or not that requires the specific identification  
3 of all of the zone players in the group.

4 **Q.** I'd like to thank you for your testimony. I'll see you  
5 again later. Thank you.

6 **THE COURT:** All right. Any reredirect?

7 **MR. SHEA:** No, Your Honor.

8 **THE COURT:** Great.

9 Okay. Dr. Almeroth, you may step down. And I know you're  
10 going to be coming back, so you're not excused permanently.

11 You can leave all those notebooks up here. The lawyers  
12 will take care of that.

13 **THE WITNESS:** Thank you, Your Honor.

14 (Witness excused subject to recall.)

15 **THE COURT:** Okay. Let's go to the next witness.

16 **MR. RICHTER:** Good morning, Your Honor. Cole Richter  
17 for Sonos.

18 At this time we think it would be appropriate to read in  
19 one of the discovery responses that we've designated for  
20 reading in. This would be Interrogatory Number 1. Would that  
21 be okay with Your Honor?

22 **THE COURT:** Sure. Before you do that, I'm going to  
23 tell the -- now, you got to read the entire answer. You can't  
24 just read part of it. You've got to...

25 I told you about depositions. There's another discovery

## PROCEEDINGS

1 investigating tool called an interrogatory. So the one side or  
2 the other can send a question in writing to the other side and  
3 say "Please answer this question within 30 days," and then the  
4 other side has to answer it within reason under oath, and then  
5 that answer can then be used at trial as evidence.

6 So -- and Counsel -- I told you nothing a lawyer ever says  
7 is evidence. This is an exception because he's going to read  
8 it exactly, and you're going to follow along to make sure that  
9 it's read exactly, and then this will be evidence in the case.

10 So tell us what the interrogatory number is, the date of  
11 it, the date of the answer, and who verified it for -- if you  
12 have all that information. Go ahead.

13 **MR. RICHTER:** I believe I do, Your Honor.

14 This was an interrogatory served by Sonos on Google, and  
15 Google's lawyers have signed it and the date was December 23,  
16 2021.

17 We had designated and agreed on a specific portion of the  
18 response to read, Your Honor, but if you'd like me to --

19 **THE COURT:** If you both agree on the response, then  
20 I'll accept that.

21 **MR. RICHTER:** Okay. Thank you very much. It shortens  
22 it, so I think that's better.

23 **THE COURT:** All right.

24 **MR. RICHTER:** Okay. The interrogatory states (as  
25 read):

## PROCEEDINGS

1 "Describe in detail when and how Google first became  
2 aware of each patent in suit and the steps, if any, taken  
3 by Google as a result of such awareness, including but not  
4 limited to an explanation of the circumstances surrounding  
5 Google's acquisition of such awareness and identification  
6 of the persons who first became aware of each patent in  
7 suit and the source of such awareness (person, document,  
8 or otherwise) and an identification of the Google  
9 employees, officers, or directors that were aware of each  
10 patent in suit prior to the filing of the above captioned  
11 litigation."

12 Response (as read):

13 "Google first became aware of the existence of the  
14 '966 patent on or around September 28, 2020, when Sonos  
15 sent a draft complaint" -- "sent a draft of the complaint  
16 to Google the day before it filed the Western District of  
17 Texas action."

18 At this time, Your Honor, we would like to play the video  
19 deposition of Google employee Mr. Tim Kowalski. The run time  
20 is about 11 minutes.

21 **MS. BAILY:** Google just notes its objections that it  
22 filed yesterday.

23 **THE COURT:** All right. I'm going to overrule those  
24 objections, and let the entire -- I believe whatever we saw  
25 yesterday be played.

## PROCEEDINGS

1       So -- but this is -- you're about to see a deposition of a  
2 Google employee named Kowalski.

3       Spell that name for us so the jury can write it down.

4       **MR. RICHTER:** Absolutely. K-O-W-A-L-S-K-I.

5       **THE COURT:** All right. Roll the tape, please.

6               (Video was played but not reported.)

7       **THE COURT:** Okay. Is that it?

8       **MR. RICHTER:** That's it, Your Honor.

9       **THE COURT:** All right. Next witness.

10       Are there documents you want to put in evidence?

11       **MR. RICHTER:** Yes. Thank you. Just one. That would  
12 be TX8240. We would move that document into evidence.

13       **THE COURT:** Is that the declaratory relief?

14       **MR. RICHTER:** It is, Your Honor.

15       **THE COURT:** All right.

16       **MR. PAK:** No objection subject to the issues that  
17 we've been discussing, Your Honor.

18       **THE COURT:** Those objections are overruled, and 8240  
19 in evidence.

20               (Trial Exhibit 8240 received in evidence.)

21       **THE COURT:** Okay. Next witness.

22       **MR. RICHTER:** Okay, Your Honor, at this time Sonos  
23 would like to call to the stand Ms. Alaina Kwasizur.

24       Your Honor, would it be appropriate before Ms. Kwasizur  
25 takes the stand to clear off those binders?

1           **THE COURT:** Yes, it would.

2           **MR. RICHTER:** Okay.

3           **THE COURT:** Tell me how long the deposition lasted  
4 then. Did you say 11 minutes?

5           **MR. RICHTER:** Yes, Your Honor, 11 minutes all for  
6 Sonos' time.

7           **THE COURT:** All right. Who's our next witness?

8           **MR. SULLIVAN:** It's Sonos' General Counsel Alaina  
9 Kwasizur. They're just clearing off the desk, Your Honor.

10          **THE COURT:** Great. Okay.

11          **THE CLERK:** Please raise your right hand.

12                       **ALAINA KWASIZUR,**  
13 called as a witness for the Plaintiff, having been duly sworn,  
14 testified as follows:

15          **THE CLERK:** Please speak directly into the microphone,  
16 state your full name for the record and spell your last name.

17          **THE WITNESS:** Alaina Catherine Kwasizur, last name  
18 K-W-A-S-I-Z, as in zebra, U-R.

19          **THE COURT:** Welcome and thank you.

20           Now, you're going to need to move this a little closer to  
21 your voice so that you don't have to lean over so far. It'll  
22 be more comfortable.

23          **THE WITNESS:** Is that better?

24          **THE COURT:** That's much better.

25           All right, counsel, go ahead.

**KWASIZUR - DIRECT / RICHTER**

1           **MR. RICHTER:** Thank you, Your Honor.

2                           **DIRECT EXAMINATION**

3           **BY MR. RICHTER:**

4           **Q.** Good morning, Ms. Kwasizur.

5           **A.** Hi.

6           **MR. RICHTER:** Your Honor, may I approach the witness  
7 with a witness binder for the exhibits?

8           **THE COURT:** Of course. Go ahead.

9           **MR. RICHTER:** Thank you.

10                           (Pause in proceedings.)

11           **BY MR. RICHTER:**

12           **Q.** Ms. Kwasizur, you're employed by Sonos; is that right?

13           **A.** Yes, that's correct.

14           **Q.** Where are you from, Ms. Kwasizur?

15           **A.** I'm from San Diego. I live in San Diego with my husband  
16 and two sons, 10 and 12.

17           **Q.** So do you work remotely from home then?

18           **A.** I do. I work out of an old garage in my backyard. I like  
19 to joke that that's Sonos' San Diego headquarters.

20           **Q.** What's your job at Sonos?

21           **A.** I'm our General Counsel of Americas and Pacific. So  
22 everywhere but Europe.

23           **Q.** Have you ever testified at a trial before?

24           **A.** No, I have not. This is not a normal day for me in my  
25 job.



1 Q. What would be a normal day for you at your job at Sonos?

2 A. I mean, usually, like I said, I sort of work in any  
3 backyard. I spend most of my mornings on Zoom calls. I look  
4 at contracts all day and work on deals.

5 And in the afternoon I take a break, go pick up my boys  
6 from school, although really just the little one because the  
7 older one's too cool for me now; and then, you know, finish my  
8 day reviewing documents and things like that.

9 Q. What are your general job responsibilities at Sonos as  
10 General Counsel?

11 A. Well, I work on a ton of different legal matters that come  
12 up throughout the company. You know, we have all sorts of  
13 things.

14 But relevant to this case I work on partnership  
15 agreements, most of our major partners. So I worked on  
16 agreements with any of our music partners, like Spotify, Google  
17 Music, things like that; and then I also work on any of our  
18 licensing agreements and any of our IP licenses.

19 Q. Have you done other jobs at Sonos besides the ones you  
20 just described?

21 A. I have. I started as a sort of senior counsel, and I  
22 focused on product things; and then I also for a period of  
23 time, about two and a half years, our CEO asked me to be our  
24 chief diversity inclusion officer so I did that in conjunction  
25 with my legal job. I had two jobs for a while.

1 Q. How did you start working at Sonos?

2 A. Well, I started back in 2013. I -- I had purchased a  
3 Sonos for my home. It was actually one of my first, like,  
4 adult purchases. I was obsessed with my Sonos system because  
5 back then it was like so revolutionary. You could play any  
6 music just from a controller in your hand, and it was just so  
7 awesome.

8 So I was kind of obsessed with the company; and when I saw  
9 that they had a job posting in the legal department, I reached  
10 out to a friend who already worked there and then he confirmed  
11 that it was a great company and so I applied, and luckily they  
12 hired me and that was almost ten years ago now.

13 Q. And, briefly, prior to working for Sonos, did you have  
14 other jobs in the -- in the industry?

15 A. Yeah. I worked at two other companies. I worked at a  
16 company called DivX, which used to do video compression  
17 software. We licensed out some video compression software.

18 And then I also worked at a company called ROVI, which  
19 later went on to become TiVo, and they sort of licensed  
20 technology in the video space, streaming of video, things like  
21 that.

22 Q. What did you study after high school, Ms. Kwasizur?

23 A. Sorry. I'm going to take a sip of water.

24 Q. No problem.

25 A. After high school, I went to college and I got my BS in

1 psychology with a premed concentration from the University of  
2 Florida, and then I went on to law school and got my law degree  
3 from the University of Miami.

4 **Q.** Can you tell us about Sonos' business generally?

5 **A.** Sure. Well, when I started, our mission was to fill every  
6 home with music. That's one of the reasons I joined. I really  
7 believed in the mission. I'm a lover of music. I was a lover  
8 of tech. I still am. So our mission was to fill every home  
9 with music, and that really resonated with me.

10 As we've grown, we now aspire to be the world's leading  
11 sound experience company. We've sort of broadened our horizons  
12 a little bit I would say. But, you know, we primarily do that  
13 through selling speakers. I mean, we sell all sorts of  
14 speakers: Home theater; you know, portable, a variety of  
15 speakers. We -- basically our mission is to make sure people  
16 have more music in their lives because that's -- you know, it  
17 brings people joy. So that's -- that's primarily what we do.

18 **Q.** Can you tell us about Sonos' patent portfolio?

19 **A.** Sure. I think pretty early on, you know, the founders  
20 realized they were doing something pretty unique and different.

21 Back then, you know, this is the early 2000s, the only way  
22 to have music in your home, which I think you guys saw some of  
23 the slides that we have floating around Sonos with the wires  
24 come out, really the only way to have music throughout your  
25 home was to put holes in your walls and have an installer come

1 in and put speakers, and it wasn't really a practical way for  
2 most people to have music throughout their home.

3 And so I think when the founders came up with the idea to  
4 do it using Wi-Fi, they realized that was sort of a game  
5 changer for most people who liked having music in their homes.  
6 And so I think, you know, they started really innovating on  
7 that, and they also realized that the best way to protect your  
8 innovation is using the patent system and so they started  
9 filing for patents fairly early on in Sonos' history.

10 And since then -- I mean, just beyond that, I would say  
11 over the years we've really continued with, like, innovation is  
12 sort of one of our core values of the company, and so we've  
13 always sort of just continued to build on that. We have, like,  
14 Hack Week and all these things where everyone around the  
15 company comes up with ideas. I actually participated in Hack  
16 Week once. I was very proud of myself.

17 We take those ideas and we continue to file patents when  
18 they're worth the energy and the time. We file patents for  
19 those, and so we have all sorts of patents. I think we have a  
20 lot at this point. There's a whole list on our website where  
21 you can see them; but, yeah, we have -- we continue to file  
22 patents.

23 **Q.** About roughly what size is Sonos' patent portfolio today  
24 in the United States?

25 **A.** I think we're between a thousand and 1,500 or so. I'm

1 not -- I don't track the numbers like some of my colleagues do.

2 **Q.** And the -- can you tell us generally the subject matter of  
3 Sonos' patent portfolio, what the patents generally are  
4 directed to as a whole?

5 **A.** I mean, they're all sort of directed to the home audio  
6 space. Like I said, our whole goal in life is to make sure  
7 that people get to listen to music in their lives or have great  
8 sound experiences. So we have some that are around sort of  
9 like the grouping technology, some around volume controls, some  
10 around how you set up your players, home theater. We have  
11 things around just the sound for home theater.

12 We have all sorts of stuff. We even have some now in the  
13 voice realm. One of my favorites that's a little bit more  
14 recent in time is we have ones that if -- it basically  
15 listen -- it figures out how your room is configured and based  
16 on where your furniture is, and that sort of thing, and where  
17 your speakers are. It makes -- it optimizes the sound for the  
18 way your room is set up. It's called Trueplay. I think that's  
19 one of my favorites at least.

20 But, yeah, we're pretty -- pretty proud of our patent  
21 portfolio. I think we've come up with innovative ideas; and,  
22 you know, a lot of employees contribute to it so it's a nice  
23 thing for the company to talk about and be proud of.

24 **Q.** Would you mind turning in your binder to TX307?

25 **A.** (Witness examines document.) 307? Sorry. 0307. Got it,

1 yeah.

2 Q. And what is that document, Ms. Kwasizur?

3 A. This is the IEEE patent power ranking from 2017 for the  
4 electronics industry it looks like.

5 Q. This is a document you've seen before?

6 A. I have.

7 MR. RICHTER: Your Honor, we'd like to move TX307 into  
8 evidence.

9 MS. BAILY: Objection, Your Honor. It's hearsay.  
10 There's no foundation. 403.

11 THE COURT: Sustained.

12 BY MR. RICHTER:

13 Q. Ms. Kwasizur, why did Sonos initially pursue patents?

14 A. Well, I think, you know, back in the day, they realized  
15 that they were really doing something new and interesting and,  
16 you know, the sort of whole point of a patent system is to  
17 protect innovation; and so I think -- I think that our founders  
18 realized that, and so they started creating a patent portfolio  
19 to sort of protect themselves from another company coming in  
20 and basically taking their idea before they had grown enough to  
21 really establish a business.

22 I think, you know, probably some of the testimony from  
23 Nick and others you could see early days, you know, it was a  
24 startup; right? So they were trying to protect themselves  
25 really, protect their business.

1 Q. And why does Sonos continue to pursue patents?

2 A. Well, like I said, one of our core values is innovation.  
3 I mean, we really believe in IP and sort of the fairness of all  
4 of it, and so I think we continue. When we have innovation,  
5 you know, we take a look at the ideas that people come up with  
6 across the company and we try to protect the things that are  
7 innovative there. You know, if we come up with something new,  
8 like the room thing I was telling you about, we want to make  
9 sure that that's something we can use and something that  
10 benefits our business.

11 Q. Has Sonos licensed its patent portfolio before?

12 A. Yes. We have a couple -- a couple of patent licenses.

13 Q. Okay.

14 MR. RICHTER: Mr. Jay, would you mind bringing up  
15 TX7220 and Slide 50 in particular please?

16 (Pause in proceedings.)

17 THE COURT: Sorry.

18 MR. RICHTER: Thank you.

19 BY MR. RICHTER:

20 Q. Ms. Kwasizur, what do we see on this slide here?

21 A. You can see this is a timeline of sort of when Sonos came  
22 up with their innovation and when others started adopting that  
23 innovation -- that same innovation.

24 Q. So I think we see Sonos arrow at the bottom, but moving up  
25 from that arrow, I think we see "Bluesound." Who is Bluesound?

1   **A.**   Yeah, you can see Sonos at the bottom there around  
2   January 2004, which apparently is our first CES demo; and,  
3   yeah, the next one you can see is Bluesound about -- it's the  
4   end of 2013. So several years later.

5           Sorry. Did you ask who was Bluesound? Or what was your  
6   question? Sorry.

7   **Q.**   That's okay. My question was "who is Bluesound?"

8   **A.**   Oh, yeah. Bluesound is an audio tech company or, I guess,  
9   maybe more of a traditional audio company. They make speakers  
10   and they make speakers that compete with Sonos around --  
11   starting around the end of 2013 they came out with speakers  
12   that did the same sort of multiroom functionality, the smart  
13   speaker thing that we've been talking about a little bit.

14   **Q.**   And let's take a look at the next arrow up. I believe  
15   that one says Denon HEOS. What was Denon HEOS?

16   **A.**   Yeah, Denon is a traditional, more of an old school audio  
17   brand. I think they used to make the real big speakers that  
18   people would have, like, in the '80s; but in around 2014 they  
19   also started making a multiroom sort of smart speaker that was  
20   similar to Sonos.

21   **Q.**   So in this 2014 to 2015 timeframe, did other companies  
22   come onto the market to compete with Sonos at this time?

23   **A.**   Oh, yeah, definitely. You know, around end of 2013 we  
24   started seeing competitors come on the market.

25           I mean, in many ways Sonos was sort of ahead of its time.



1 It took a little while. I mean, Sonos came out really even  
2 before streaming music was a thing, and so it took time for the  
3 streaming music adoption to really become a thing with people  
4 paying for subscriptions.

5 And then once you started seeing that trend, then you saw  
6 competitors really coming on the market. There was -- it  
7 started sort of with Bluesound, but there was a bunch of  
8 others. LG, I think Samsung has a competing product, Amazon --  
9 right? -- Google. So, yeah, there was definitely more than  
10 just shown on this slide.

11 Q. When did Google start competing with Sonos?

12 A. Well, looking at this, you know, 2015, about 10 years or  
13 so after we first released our products.

14 Q. Let's circle back to Denon. Does Denon have a license to  
15 Sonos' patent portfolio?

16 A. Yes, they do. Yes.

17 Q. And how did this license come about?

18 A. We sued Denon for infringement, and they -- the trial --  
19 we went to trial with them, and it -- all of our patents were  
20 found valid and infringed, and they were found to willfully  
21 infringe and we did a settlement license. It was both to  
22 settle the litigation and also a license agreement for them to  
23 sort of --

24 **THE COURT:** That answer is ambiguous. When the  
25 witness says "all of our licenses" -- "all of our patents were

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1 found valid."

2 **THE WITNESS:** The ones in case. Sorry.

3 **THE COURT:** The ones in that case, the ones that were  
4 asserted in that case is what you are talking about.

5 **THE WITNESS:** Yes.

6 **THE COURT:** Those were not the ones in this case;  
7 true?

8 **THE WITNESS:** No.

9 **THE COURT:** Okay. Next question.

10 **MR. RICHTER:** Thank you, Your Honor.

11 **BY MR. RICHTER:**

12 **Q.** Ms. Kwasizur, can you turn to TX6721 in your binder,  
13 please?

14 **A.** 6721 you said?

15 **Q.** Yes. That one actually may not be in your binder, but I  
16 think I have it back here.

17 **A.** Okay. I was going to say.

18 (Pause in proceedings.)

19 **MR. RICHTER:** Your Honor, may I hand the witness  
20 Exhibit 6721?

21 **THE COURT:** Sure. Go ahead.

22 **MR. RICHTER:** Thank you.

23 (Pause in proceedings.)

24 **BY MR. RICHTER:**

25 **Q.** Ms. Kwasizur --

1           **MS. BAILY:** Do you have a copy for me? I apologize.

2           **MR. RICHTER:** I think this was an exhibit you guys had  
3 designated maybe for cross.

4           **MS. BAILY:** Okay.

5           **BY MR. RICHTER:**

6           **Q.** Let me ask you this: Do you recognize this document,  
7 Ms. Kwasizur?

8           **A.** Yes, I do.

9           **Q.** And what do you recognize it as?

10          **A.** This is our license agreement with Denon or the parent  
11 company DEI.

12          **Q.** And did you participate in the negotiations of this  
13 license agreement?

14          **A.** I did.

15               **MR. RICHTER:** Your Honor, at this time we'd like to  
16 move TX6721 into evidence.

17           **MS. BAILY:** No objection.

18           **THE COURT:** What? 67 -- did you say "objection"?

19           **MS. BAILY:** I said "no objection."

20           **THE COURT:** No objection.

21 All right. I think your microphone is not turned on.  
22 6217?

23           **MR. RICHTER:** 6721, please.

24           **THE COURT:** All right. That's in evidence.

25 (Trial Exhibit 6721 received in evidence.)

1           **THE COURT:** You can show it to the jury.

2           **MR. RICHTER:** Okay. Let's just bring up the first  
3 page.

4           **BY MR. RICHTER:**

5           **Q.** Okay. And is this the document we've been looking at,  
6 Ms. Kwasizur?

7           **A.** Yes, this is the same document.

8           **Q.** And can you remind us what type of license the Sonos-Denon  
9 license is?

10          **A.** This was, like I said, both to settle the active  
11 litigation and a patent license agreement between us and Denon.  
12 It was a global license. It was a running royalty rate whereby  
13 you get -- basically they pay -- each unit they sell, they pay  
14 an amount based on each unit.

15          **Q.** I think you might have said a running royalty rate. Did  
16 you -- did you mean something different?

17          **A.** Oh, sorry. Yeah, one is -- was a different one.

18               Yeah, no, this one was actually a lump sum -- I'm sorry --  
19 because we knew how much units they had sold as part of the  
20 litigation, we just sort of did the math and turned it into a  
21 lump-sum payment.

22          **Q.** Were the patents in suit covered by this license  
23 agreement?

24          **A.** No, they were not.

25          **Q.** Let's turn to Bluesound. I believe you mentioned that

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1 Bluesound was licensed. Do I have that right?

2 **A.** Yes, that's correct, Bluesound has also taken a patent  
3 license.

4 **Q.** And how did that license come about?

5 **A.** That one we sent them a letter and then we ended up suing  
6 them. We had some conversations with them, and then we ended  
7 up suing them and it settled very early in the case. I don't  
8 remember exactly when, but they decided to take a license.

9 **Q.** Would you mind turning to TX6632 in your binder?

10 **MR. RICHTER:** Your Honor, may I approach and retrieve  
11 the previous exhibit.

12 **THE COURT:** Of course. Go ahead.

13 (Pause in proceedings.)

14 **BY MR. RICHTER:**

15 **Q.** What is this document, Ms. Kwasizur?

16 **A.** This is our patent license between Sonos and Lenbrook,  
17 which is the company that makes the Bluesound products.

18 **Q.** And did you help -- did you participate in the  
19 negotiations of -- that led to this license?

20 **A.** Yes, I did.

21 **MR. RICHTER:** Your Honor, can we move into evidence  
22 TX6632?

23 **MS. BAILY:** No objection.

24 **THE COURT:** Thank you. Received in evidence.

25 (Trial Exhibit 6632 received in evidence.)

1           **MR. RICHTER:** And do we have permission to publish the  
2 exhibit, Your Honor?

3           **THE COURT:** Yes.

4           **MR. RICHTER:** Thank you.

5           **BY MR. RICHTER:**

6           **Q.** Is this the license we've been looking at, Ms. Kwasizur?

7           **A.** Yes. This is -- yes, this the Lenbrook license.

8           **Q.** What type of license is the Lenbrook license?

9           **A.** So this one -- this one is a running royalty license.

10          Yeah, it's a running royalty license covering our patent  
11 portfolio.

12          **Q.** And generally can you explain what a running royalty  
13 license is?

14          **A.** So a running royalty license, or sometimes called a per  
15 unit license, is when basically the infringing products would  
16 pay each unit they sell. So it's based on the units rather  
17 than one -- the other one was sort of a lump sum where you pay  
18 once.

19          **Q.** And are the patents in suit, the '885 and the '966, are  
20 they covered by this license?

21          **A.** No, they are not.

22          **Q.** Let's turn to page 6 of TX6632.

23          At the very top of the screen, the table, what do we see  
24 here?

25          **A.** So that is the royalty rate that we agreed to in this

1 agreement.

2 **Q.** Can you explain the structure of the running royalty  
3 agreement?

4 **A.** Sure. You can see it's sort of a tiered structure. We  
5 prefer to have sort of a tiered structure that increases, and  
6 so this shows -- by "tiered" I mean you can see like the  
7 products 0 to 5,000 have one price and then 5,000 to 10,000 a  
8 different, 10,000 to 20; and so you can see depending on how  
9 many products they sell, that's the rate that they would pay.

10 **MR. RICHTER:** And can we bring up page 2, Mr. Jay?

11 And the definition of licensed patents, can we highlight  
12 that?

13 **BY MR. RICHTER:**

14 **Q.** I think, Ms. Kwasizur, you had mentioned that the patents  
15 in suit were not covered by this license agreement; but reading  
16 this definition here, licensed patents, would that refresh your  
17 recollection as to whether the patents in suit are covered by  
18 the Lenbrook license here?

19 **A.** Oh, yes, they would be covered under this agreement today.  
20 Sorry. At the date -- the date we entered it they were not  
21 covered because they weren't issued yet, but the license  
22 covered our whole patent portfolio. So, yes, they cover the  
23 patents in suit today.

24 **Q.** Okay. I think I understand.

25 The patents in suit -- are you saying the patents in suit

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1 were not issued yet so at the -- are you saying at the time of  
2 the -- you entered into the license they didn't --

3 **A.** Yeah. Correct.

4 **Q.** Okay. So when the patents did issue, would they have then  
5 been covered by this license agreement?

6 **A.** Yeah. Any patents at issue automatically roll into the  
7 license agreements. They get a portfolio license so, yes,  
8 correct.

9 **Q.** Can I have you look, Ms. Kwasizur, in your binder for  
10 TX6631?

11 **A.** (Witness examines document.)

12 **Q.** What is this document when you're ready?

13 **A.** This is another license agreement. This is a license  
14 agreement between us and a company -- well, they go by the name  
15 Legrand, but the parent company is Pass & Seymour. So on the  
16 document itself -- I'm sorry. Pass & Seymour. It's their  
17 parent company of Legrand.

18 **Q.** And what does Legrand make or sell, if anything?

19 **A.** Legrand also makes a multiroom home audio product that  
20 competes with Sonos.

21 **Q.** And what type of license did Sonos and Legrand negotiate  
22 and sign?

23 **A.** This one was also similar, a running royalty to our patent  
24 portfolio.

25 **MR. RICHTER:** Your Honor, can I move TX6631 into



1 evidence.

2 **MS. BAILY:** No objection.

3 **THE COURT:** Received.

4 (Trial Exhibit 6631 received in evidence.)

5 **THE COURT:** You can show it to the jury.

6 **MR. RICHTER:** Thank you, Your Honor.

7 **BY MR. RICHTER:**

8 **Q.** Ms. Kwasizur, was this license agreement a settlement of a  
9 lawsuit of any kind?

10 **A.** No. This one we had sent them a notice letter, and then  
11 we engaged in some negotiations and then we settled on having a  
12 license.

13 We actually really don't like to litigate. It's not as  
14 fun as it might seem here. So we try to generally -- we reach  
15 out to companies, we try to negotiate a fair deal, and do a  
16 license agreement. That's our preference.

17 **Q.** Are the patents in suit, the '885 and the '966, are they  
18 covered by this license agreement?

19 **A.** Yes, they would be.

20 **MR. RICHTER:** And can we look at page 6, Mr. Jay.  
21 Thank you.

22 **BY MR. RICHTER:**

23 **Q.** And what do we see on the screen here, Ms. Kwasizur?

24 **A.** Sorry. I have to keep taking my glasses off to read.

25 Page 6 we see the royalty rate similar to the other one.

1 It's a tiered structure. This is sort of what we do with all  
2 of them, we try to have this tiered structure where it  
3 increases. The more the company sells, the rate goes up.

4 **Q.** So I think we heard about Denon, Bluesound, Legrand. Has  
5 Sonos licensed any other companies to its patent portfolio?

6 **A.** No.

7 **Q.** And what preference, if any, does Sonos have on the form  
8 of its patent licenses?

9 **A.** Well, like I said, we, you know, prefer to have the  
10 per-unit royalty. We tend to do, you know, global if that's  
11 what they want, cross-license; but, yeah, we really prefer the  
12 per-unit royalty.

13 **Q.** Why does Sonos have that preference?

14 **A.** We actually just think it's the, like, smartest way to  
15 handle it and the fairest, to be honest. Because, you know,  
16 basically the more they sell, the more they -- well, two  
17 things. The more they sell, the more they're really cutting  
18 into our business.

19 I mean, you have to understand these are competing  
20 products. These companies, you know, potentially are taking a  
21 potential Sonos customer away from us; and with us, it's not  
22 really just one customer. We think of everything as a  
23 household. So, like, if one customer buys one Sonos, we know  
24 from our data that on average they buy 2.9 or 3 more products.  
25 I mean, I think you heard the Google Mr. Kowalski in the video

1 say he has eight; right?

2 So for us, as soon as we lose one customer, it's really  
3 more than just one customer that we might lose; and so we've  
4 come up with this tiered structure to try to compensate us  
5 more. If they're cutting into our business more, then they  
6 should pay more because they're taking more of our customers.

7 And also in fairness to them, if they sell little, like if  
8 they're just in some niche market, like maybe there is some  
9 crazy high end that we don't compete with or something and they  
10 only sell, you know, 500 units a year, they don't have to pay  
11 as much. So we feel it's really the fairest way to handle it.

12 And then we also -- not only would they not have to pay;  
13 but if they sold nothing really, they'd have to pay nothing.  
14 But also it's sort of the industry standard to have the per  
15 unit because -- another reason is because if they have new  
16 products, you know, companies don't want to tell other  
17 companies like, "Hey, we have a new product coming out," and  
18 this way it covers them for future products.

19 Like these deals are five years long; right? So that way  
20 they can -- they can release their product knowing how much it  
21 will cost them without having to, like, disclose to a  
22 competitor that, "Hey, we have a new product."

23 And so -- and it's the industry standard. You see it in  
24 most licensing agreements.

25 **Q.** So I think I heard you say that Sonos really competes for

1 households. Can you elaborate a little more on that?

2 **A.** Yeah. Like I was saying, you know, we don't -- we don't  
3 think of our users really as individual -- well, we don't think  
4 of the users as individuals when we think of products. We  
5 think of it as a household. And, I mean, even in the way we  
6 design our products, like, everything works together.

7 Like, this concept of you have household, it's actually  
8 what makes Sonos so magical and what made it work in the  
9 beginning and so popular is because it is music for throughout  
10 your home. You can play one song, one song there, you can play  
11 music everywhere.

12 So when we look at households, you know, we do look at how  
13 much our customers buy and how likely they are to buy another  
14 Sonos product or another one; or even -- even if you bought  
15 this one product, you are probably more likely to buy this, you  
16 know, home theater thing.

17 Like, we tend to look at it in the aggregate as  
18 households. So, like I said, on average one customer buys I  
19 think it's up to 2.98 is the latest stat on how you know what  
20 the repeat trends are, so...

21 **MR. RICHTER:** And, Mr. Jay, maybe we can bring up  
22 TX7200 again and take a look at page 13.

23 **BY MR. RICHTER:**

24 **Q.** Is this basically what you were describing, Ms. Kwasizur?

25 **A.** Yeah. Yeah. You can see there on the left, 2.9 -- I

1 think this slide might be from further back in time. I think  
2 we're up to 2.98 as of yesterday, but 2.9 products per  
3 household.

4 And then we calculate -- that LTV is lifetime value. So  
5 that's, like, what we think a customer's lifetime value of them  
6 buying products over time.

7 And so you can see that -- I don't know when this slide  
8 was from, but I think it was from maybe a few years ago. You  
9 can see we were sort of looking at our potential as we came out  
10 with new products, which some of those products have been  
11 released now.

12 So you know we thought that we could get the lifetime  
13 value up to 400 to 600 with maybe four to six products a  
14 household as we come out with new compelling products that we  
15 thought our customers might add-on to their home, like things  
16 for the outdoor or more home theater or whatever the case might  
17 be.

18 **MR. RICHTER:** Mr. Jay, can we turn to the page 1 of  
19 this exhibit?

20 **BY MR. RICHTER:**

21 **Q.** And, Ms. Kwasizur, does that date there refresh your  
22 recollection as to when this slide was --

23 **A.** Oh, yes.

24 **Q.** -- created on or about?

25 **A.** Yes. So it's from March 9th, 2021.

1 Thank you Mr. Jay.

2 Q. So we heard a lot this week about Sonos not releasing the  
3 feature practiced by the asserted patents in this case until  
4 2020. Do you remember hearing some of that testimony?

5 A. Yes, I did.

6 Q. And do you have a perspective on that?

7 A. Sure. I mean, you heard a little bit of it from  
8 Dr. Almeroth, but I can give some of the inside-the-company  
9 perspective.

10 Like he said, some of our old products the hardware  
11 couldn't support this -- these newer features. Not just this  
12 feature, other new features as well.

13 You know, Sonos first started releasing products in 2005,  
14 and those products -- I mean, honestly the chips on those  
15 products are, like, probably similar to, like, a modern day  
16 calculator. They're really old.

17 And so as we released new products, we had this tenet in  
18 Sonos that it all has to work together. We were always very  
19 much we wanted your whole home system to work together. And so  
20 as you might imagine, when you have products that are that old  
21 that still need to work with something that new, it gets very,  
22 very complicated for the modern software to even work on those  
23 little chips.

24 And so we had this long, long running debate in the  
25 company about we knew at some point we'd have to modernize, at

1 some point you have to rip off the Band-Aid and you'd have to  
2 just basically say, "Okay, we're going to move to a new  
3 software system and some things are going to get left behind."

4 That was what the S2 software platform was, it was to be  
5 able to start putting some of these new features out there in  
6 the world and really start having more modern software  
7 architecture.

8 But unfortunately for our customers what that meant is  
9 some of the old players -- again, these are speakers from 2005  
10 you know, it would be like your Mac book from the '90s. I  
11 mean, no -- nothing really works from back then anymore; but  
12 customers when it comes to speakers felt their speakers should  
13 work, and so we had a really lively debate would be an  
14 understatement within our company about how to handle it.

15 And so where we landed was that we would -- we would move  
16 forward with this new architecture, but we did try to wait as  
17 long as we could really to protect our customers who had  
18 invested in those old systems. I mean, we knew it was going to  
19 be rough for our customers, for us. Just, you know, it was a  
20 really big change, and so we waited as long as we could before  
21 we had to move. I mean, we literally had to move to S2.

22 And so I'm pretty sure I still get e-mails weekly from  
23 customers who have those old players and are mad that they  
24 can't buy the new product and connect it with the really,  
25 really old one.

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1           So, yeah, it's -- it hasn't -- I wouldn't say it's been  
2           the funnest from a legal perspective, but I think ultimately it  
3           is the best solution for our customers because we could enable  
4           some of these new features like you've been hearing about,  
5           so...

6           **Q.**    Ms. Kwasizur, was there a time when Sonos provided notice  
7           to Google of the '966 patent?

8           **A.**    Yes.    Yes.    We provided notice September 28th, 2020.

9           **Q.**    And how was this notice provided to Google?

10          **A.**    I sent an e-mail to some folks at Google.

11          **Q.**    And can I have you turn to TX6310 in your binder?

12          **A.**    TX -- sorry.   Which one?   660?

13          **Q.**    6130.

14          **A.**    (Witness examines document.)

15          **Q.**    And what is this document, Ms. Kwasizur?

16          **A.**    This is an e-mail from me to some folks at Google,  
17           including Mr. Kowalski, who you just saw in that video there  
18           before, on September 28th notifying them that we would be  
19           filing a complaint alleging infringement of the '966 patent on  
20           the next day.

21          **Q.**    You sent this e-mail; is that correct?

22          **A.**    I did.

23                   **MR. RICHTER:**   Your Honor, we'd like to move into  
24           evidence TX6130.

25                   **MS. BAILY:**   Your Honor, we object.   It violates a



1 motion in limine order.

2 **THE COURT:** You what?

3 **MS. BAILY:** We object as a violation of a MIL.

4 **MR. RICHTER:** This is an e-mail --

5 **MS. BAILY:** I can expand. I'm not sure if you'd like  
6 me to in front of the jury.

7 **THE COURT:** Well, I thought I was going to let this  
8 in, and then you can get to cross examine about all the rulings  
9 on the other patents.

10 **MS. BAILY:** Agreed on that. This refers also, though,  
11 to the licensing discussions that are out.

12 **THE COURT:** I just didn't hear you. Say it again.

13 **MS. BAILY:** This refers to the licensing discussions  
14 that I believe Your Honor ordered were out for both parties.

15 **THE COURT:** Well, just a minute.

16 (Pause in proceedings.)

17 **THE COURT:** What sentence is that? Is that the second  
18 sentence?

19 **MS. BAILY:** It is the first two sentences.

20 **THE COURT:** Well, the -- the first paragraph is  
21 self-serving and will be stricken.

22 The second paragraph will be allowed. So don't put up the  
23 first paragraph. It's -- it's self-serving from Sonos' point  
24 of view. It could be true, it couldn't.

25 She can testify to all of that if she wishes, but -- that

1 wouldn't be okay, but the document itself is hearsay and it has  
2 things that you would be using to prove up the truth of them  
3 and they're unnecessary for notice.

4 So the -- the second paragraph will -- and the third  
5 paragraph, I'm going to allow the third paragraph.

6 **MS. BAILY:** The last sentence, Your Honor?

7 **THE COURT:** Including that because -- well --

8 **MS. BAILY:** I think we would --

9 **THE COURT:** It's just too argumentative and  
10 self-serving. I'm just -- let me explain to the jury what's  
11 going on.

12 This is like a nastygram. The author is telling the other  
13 side how unreasonable they've been and then saying "We're going  
14 to sue you tomorrow."

15 Well, should I allow into evidence a document that says --  
16 if she wants to testify to them being unreasonable, that's one  
17 thing, but -- that's subject to cross-examination; but this  
18 poor document is not.

19 So it's self serving so I'm going to allow the part that  
20 says "We continue to be hopeful that Google will reconsider its  
21 infringement," period. And then the rest of that sentence is  
22 stricken and the first whole paragraph is stricken, but  
23 otherwise it can come into evidence.

24 **MS. BAILY:** Just to be clear, are you permitting now  
25 evidence to come in of all these discussions?

1           **THE COURT:** I don't know. I would say -- didn't I  
2 rule that out.

3           **MS. BAILY:** You did.

4           **THE COURT:** Not because it -- it's just 403, and there  
5 were discussions finger pointing. It's not going to help the  
6 jury. So I'm not actually going -- I'm not going to allow that  
7 into evidence either.

8           All right. So that's it. You can use this letter --  
9 e-mail, I guess it is, as amended.

10          All right. 6130 in evidence with those amendments.

11          (Trial Exhibit 6130 as amended received in evidence.)

12           **MR. RICHTER:** And would the Court prefer to receive a  
13 redacted version before we publish it to the jury?

14           **THE COURT:** I think so, yes.

15           **MR. RICHTER:** Okay.

16           **THE COURT:** But you can read it out loud. She can  
17 read it. It's not very long. You can start with "Attached  
18 please find" -- I'll read it for you. Are you ready? (as  
19 read):

20           "Attached please find" --

21           **MR. RICHTER:** Your Honor, if the Court's ready to  
22 receive this document with redactions, we would renew our  
23 objection to receive the document with objections to the other  
24 material as well.

25           **THE COURT:** Here's what's going on here: Sonos in

1 their complaint, they accused them of violating a number of  
2 patents, some of which I later found to be invalid, and that's  
3 what they're fighting over here.

4 But the ones -- the '966 patent, that has not been found  
5 to be invalid, at least yet. So that's something that maybe  
6 you're going to have to decide.

7 It -- this is -- the jury can know this. This is not  
8 prejudicial to anybody. So I'm going to let the other side  
9 bring it all out, but not the licensing discussions that went  
10 on. That is just finger pointing at both sides about how  
11 unreasonable they were.

12 Okay. So we're not going to go there.

13 Next question.

14 **MR. RICHTER:** Understood. Thank you, Your Honor.

15 **THE COURT:** How much more do you have? Because we're  
16 getting close to time for a break.

17 **MR. RICHTER:** Good question. Maybe 10, 15 minutes.

18 **THE COURT:** Let's take our break now.

19 Please remember the admonition. Don't discuss the case.

20 **THE CLERK:** All rise for the jury.

21 (Proceedings were heard outside the presence of the jury:)

22 **THE COURT:** All right. Please have a seat.

23 The witness, you may step down and use the facility as you  
24 wish.

25 I have some -- I've got some points to bring up with the

1 lawyers. I want to go back to what we were talking about.

2 **MR. PAK:** Yes, sir.

3 **THE COURT:** Mr. Pak, you didn't mislead me, I don't  
4 suppose, but I got -- I did not fully understand what you were  
5 saying. And I thought you were saying 5B -- there was never a  
6 5B to begin with in the original.

7 **MR. PAK:** I apologize if I created that impression.  
8 What I was saying is that 5B in the original application did  
9 not have that sentence. That's the point I was --

10 **THE COURT:** All right. But did it have that same  
11 diagram?

12 **MR. PAK:** Yes, it did have that same cut-off diagram.

13 **THE COURT:** All right. So what would be useful to me  
14 would be to have a little notebook -- not a big thick notebook  
15 but one about an inch thick at most -- that has in  
16 chronological order what was at the PTO and was it in an  
17 appendix, where was it. Something that I can go step by step  
18 with the dates on it, what was printed, when it got printed,  
19 when it was public, and when it first began to teach something.

20 All right. That -- I would like to have that. Do all the  
21 highlighting you can.

22 **MR. PAK:** Yes, sir.

23 **THE COURT:** So that's number one.

24 I have a different point I want to bring up. I'm sorry.

25 Okay. I want to put you on notice and invite you to give

1 me briefing on claim construction of the '966.

2 In this case Sonos has been arguing, and your own  
3 witnesses have been arguing -- Mr. Almeroth, for example --  
4 that the '966 would cover a mere smartphone with the Home app  
5 downloaded whether or not it's connected or used with any  
6 speakers. I disagree with that for a very good reason.

7 The claim itself says that "an indication must be  
8 transmitted to the first zone player." That is impossible to  
9 do -- actually to the second zone player too -- but it's  
10 impossible to do unless it is configured with -- the controller  
11 is configured with the zone player.

12 I don't want you to argue with me now. I'm giving you a  
13 chance to put it in your briefs.

14 To my mind, that means that the accused device, which is  
15 the phone, does not infringe until it is so configured. Now,  
16 there are probably millions that are configured. I suspect  
17 that that's true.

18 So this does not gut your case by any means, but the idea  
19 that merely downloading the Home app is infringing, I'm  
20 probably -- I'm 90 percent certain I'm not going to allow that  
21 argument.

22 So I'm giving you the chance to adjust your flow and to,  
23 you know, argue with me on that. Maybe you can convince me,  
24 but by Sunday night at 5:00 p.m. you've got to give me your  
25 briefs on that point.

1 All right. I'm going to take a break here.

2 **MR. PAK:** Your Honor, on that binder, should I have  
3 that ready by Tuesday morning for Your Honor's benefit or  
4 should I try to get that to you before?

5 **THE COURT:** I guess Tuesday morning would work, but --  
6 yeah, that will have to work because I'm not going to read it  
7 over -- I'm not going to read it over the weekend; or my law  
8 clerk may read it over the weekend, but I'm not going to.

9 **MR. RICHTER:** And do I understand that's a binder from  
10 each side, Your Honor?

11 **THE COURT:** Yes. Yes.

12 **MR. RICHTER:** Okay, Your Honor.

13 **THE COURT:** I would like for you to -- what?

14 Oh, she says Monday. Monday would be better. So let's  
15 say noon on Monday. Yes, both sides of course.

16 What did I -- oh, I have this question: If a -- if this  
17 '966 patent reaches all the way back for priority date to 2005,  
18 does the 20 years run from the 2005 or does it run from 2019?  
19 When does it run from?

20 **MR. RICHTER:** It runs from, I believe, September 12th,  
21 2007. That's the filing date of the first nonprovisional  
22 application. That's a statutory term defined by statute.

23 **THE COURT:** All right. So it would be from '07?

24 **MR. RICHTER:** Correct, Your Honor, subject to any  
25 patent term adjustment that the Patent Office determines. I

1 can't recall, but I'm not aware of any for these two patents,  
2 but sometimes other patents have that. So I just want to add  
3 that caveat. Sometimes the Patent Office says your term is  
4 extended by 50 days or 10 days or something.

5 **THE COURT:** All right. I have one other thing. Why,  
6 Mr. Pak, did Google not raise -- you're the one -- and if you  
7 go back to the summary judgment, your side is the one that  
8 injected the validity issues into the briefing. They moved for  
9 infringement, and you weren't content to just live with that.

10 You then said, "Okay. In addition, it's invalid." And  
11 then you were the one that raised them, but you never raised  
12 any of this stuff that you -- back then. Why didn't you do it  
13 then?

14 Now you want me to vacate -- I mean, I would be within my  
15 rights to say "Too bad to Google." Google gave me a record. I  
16 made a ruling on the basis of that record. The other side  
17 relied on it. Now we get into trial, and it's just like  
18 Mr. Clem Roberts trying to lard the record with an offer of  
19 proof and get me to -- so I feel like I -- I feel like you  
20 should have done this the first time right. So what's your  
21 excuse?

22 **MR. PAK:** So, Your Honor, my understanding is there  
23 was a showdown procedure where they had the opening brief and  
24 then we were responding, and then they got the last word. And  
25 I think there were page limits. We were covering a lot of



1 issues.

2 We had preserved the written description and the validity  
3 issues throughout the case, but it was a very limited  
4 opportunity for us to present these issues.

5 **THE COURT:** But this is the first time you ever told  
6 me any of this was last night.

7 **MR. PAK:** To be honest, Your Honor, I didn't -- I  
8 personally did not discover this until Your Honor asked us to  
9 go back through the chain, which I did, and that's when I  
10 started to look and I found these things.

11 So I do apologize that we were not able to connect the  
12 dots all the way. And, you know, I think Mr. Lambourne's  
13 testimony, there were some things about the conception document  
14 as we noted, that we saw some irregularities after we heard his  
15 testimony, so I do apologize it was not presented before  
16 Your Honor before. I do accept that there was a procedure in  
17 the showdown that gave us this opportunity. We just didn't  
18 have the opportunity, from our perspective, to, you know, fully  
19 study the record.

20 **THE COURT:** You're saying the biggest company in the  
21 world who hires the biggest law firm in the world did not have  
22 an opportunity?

23 **MR. PAK:** No, it's not that, Your Honor. It's just  
24 I -- I'm saying that we -- I personally did not discover this  
25 issue until recently, so I do apologize.

1           **THE COURT:** That's a better answer.

2           **MR. PAK:** Yes, Your Honor.

3           **THE COURT:** All right.

4           **MR. RICHTER:** I will note, Your Honor, I mean, it's  
5 very prejudicial. They did make a strategic decision. They  
6 presented this in opposition to the motion to summary judgment  
7 in the showdown procedure. Sonos responded to it, and  
8 Your Honor found in Sonos' favor.

9           We moved on with the trial. They did not present any  
10 further expert opinion or contend this fact for the remainder  
11 of the case. We prepared our case accordingly. We submitted  
12 our expert opinions. They have the burden of proof on this  
13 fact issue by clear and convincing evidence, and it's just  
14 prejudicial to be raising it on their half -- on their behalf  
15 at this time, Your Honor.

16           **THE COURT:** Well, that is -- I'm sympathetic to that  
17 and that's one of the reasons why this is such a hard job.

18           But I do feel -- I do feel that I wish I had known and  
19 you, as the patent owner, could have -- you made a big point  
20 out of that sentence being in there, and then I come to learn  
21 that it was put in there way after the fact, so -- but that's  
22 part of what you're going to be briefing is: What is the  
23 significance of it being in an appendix?

24           All right.

25           **MR. PAK:** Thank you, Your Honor.

1           **THE COURT:** Thanks. Let's take a short break.

2           **THE CLERK:** Court is in recess.

3                       (Recess taken at 9:31 a.m.)

4                       (Proceedings resumed at 9:46 a.m.)

5           (Proceedings were heard out of the presence of the jury:)

6           **THE CLERK:** Remain seated. Come to order.

7           **THE COURT:** Be seated, please.

8           Let's call in the jury and the witness. We need a  
9           witness.

10           **MR. RICHTER:** Actually, Your Honor, there may be one  
11           small issue we could take up before the jury relating to an  
12           exhibit I'm about to show the witness related to the same issue  
13           we just discussed.

14           **THE COURT:** All right.

15           **MR. RICHTER:** I'm about to introduce the draft  
16           complaint that Sonos -- Ms. Kwasizur and Sonos sent to Google,  
17           and I think it contains some of the same references to  
18           licensing discussions.

19           So I want to let Your Honor know we want to talk about the  
20           '966 portion of that complaint and then the notice of  
21           infringement of the '206 patent, which is part of the notice  
22           that Ms. Kwasizur gave.

23           **MS. BAILY:** So, Your Honor, first of all, just so that  
24           you're aware, there's an extensive discussion of the prior  
25           licensing discussions in the draft complaint so I'm just

1 flagging that.

2 **MR. RICHTER:** We could take all that out, yeah.

3 **MS. BAILY:** The notice of the '206 is completely  
4 irrelevant in this case.

5 **MR. RICHTER:** They just brought that up, Your Honor.  
6 They just -- they want to tell the jury that the '206 was part  
7 of this case. We should tell the first story on it. We can't  
8 open the door to just one side only.

9 **THE COURT:** Well, just a second. Does the -- does the  
10 draft complaint refer to these prior discussions?

11 **MS. BAILY:** Yes.

12 **MR. RICHTER:** Yes. Some paragraphs do, yes.

13 **THE COURT:** Do those prior discussions happen to  
14 include the '966?

15 **MS. BAILY:** No.

16 **MR. RICHTER:** They include zone scene discussions, but  
17 not the '966 specifically. They do include claim charts of  
18 infringement of '966. That's what we want to use in part and  
19 notice of the '206.

20 **THE COURT:** How could it include -- how can it include  
21 that if it's not even sued on?

22 **MR. RICHTER:** It was a draft complaint, Your Honor.  
23 So we had laid out --

24 **THE COURT:** I see what you mean.

25 **MR. RICHTER:** Yes, Your Honor.

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1           **THE COURT:** But did the prior discussions include  
2 '966?

3           **MR. RICHTER:** No, not the '966, but it did include the  
4 '206, which is a patent mentioned in that e-mail and in the  
5 draft complaint.

6           **MS. BAILY:** Your Honor, if we open the door to the  
7 licensing discussions, we need to put in the term sheet.

8           **MR. RICHTER:** This doesn't open the door to the  
9 licensing discussions. It's prior notice of a patent, not the  
10 licensing discussions.

11           **THE COURT:** Well --

12           **MS. BAILY:** Prior --

13           **THE COURT:** -- I'm not sure of that. I don't want the  
14 part about prior discussions to come in.

15           **MR. RICHTER:** Can I hand up the exhibit so we know --

16           **THE COURT:** Yes.

17           **MR. RICHTER:** Okay.

18                           (Pause in proceedings.)

19           **THE COURT:** Look, give it to me, please.

20           But, see, you're just trying to do this out of the  
21 presence of the jury and wasting the jury's time. I'm going to  
22 tell you what the ground rule is.

23           The prior discussions had nothing -- had nothing to do  
24 with the '966 patent; true? True. So I don't think that  
25 should come in and it's too remote.

1       There were other patents that were discussed back then,  
2       and some of these were probably sued on here, but that -- the  
3       '966 and the term sheet and those discussions I'm not going to  
4       allow, so you're going to have to redact those portions of the  
5       complaint.

6       But it is okay to put in and leave in the other patents  
7       that were sued upon and which the witness on the stand was  
8       complaining about so that the other side can point out, "Hey,  
9       look how many patents they accused us of and all of them have  
10      fallen away and we're down to two patents."

11      That's fair game. That -- it's okay. The jury will get  
12      it.

13      So you have to -- you're going to have to do some  
14      redacting on the -- on this document, but -- so that's what's  
15      going to happen. The prior discussions don't come in because  
16      the '966 hadn't even issued yet.

17           **MS. BAILY:** Your Honor --

18           **MR. RICHTER:** But to be clear, references to the  
19      '206 -- paragraph 20 references to the '206 patent?

20           **THE COURT:** You can refer to the fact that it was sued  
21      on, but you cannot refer to the fact that there was discussions  
22      on the '206 because the '206 is out of the case.

23           **MR. RICHTER:** Well, yeah, it's notice of infringement  
24      of the '206 patent, but I understand Your Honor's ruling to be  
25      that the parties are now allowed to discuss the patents that

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1 were previously sued on but are no longer in the case; and  
2 we're just attempting to show that we gave notice of the '206  
3 patent, the patent that was in the complaint.

4 **THE COURT:** Yeah, but what good does notice do?

5 **MR. RICHTER:** It does --

6 **THE COURT:** What good does -- a patent you've already  
7 lost on, what good does it do to show the jury you gave notice  
8 of that?

9 **MR. RICHTER:** We withdrew it from the case, yes,  
10 correct, Your Honor, but we gave notice of infringement of the  
11 '206, which is the parent to the two patents --

12 **THE COURT:** Parents and family, not enough. Parents  
13 and family, not enough. Now the Federal Circuit may disagree  
14 with me, but this has got to stop someplace.

15 You lawyers have got to learn to give real notices in a  
16 timely fashion instead of night before. That's just  
17 gamesmanship.

18 Okay. I'm not making anymore rulings. I'm done with  
19 this. Let's bring back the jury.

20 **THE CLERK:** Your Honor, does the witness need to be --

21 **THE COURT:** Yes, the witness ought to come back.

22 (Pause in proceedings.)

23 **THE CLERK:** All rise for the jury.

24 (Proceedings were heard in the presence of the jury:)

25 **THE COURT:** Welcome back. Please be seated.

1 Counsel, you may continue.

2 **MR. RICHTER:** Thank you, Your Honor.

3 **BY MR. RICHTER:**

4 **Q.** Welcome back, Ms. Kwasizur.

5 **A.** Thank you.

6 **Q.** Before the break, I believe we were talking about an  
7 e-mail that you sent to Google attaching a draft complaint and  
8 referencing the '966 patent; is that correct?

9 **A.** Yes.

10 **Q.** Can you tell us why Sonos sent that e-mail to Google?

11 **A.** We sent that as a courtesy to let them know that we  
12 intended to file suit alleging infringement of the '966 patent  
13 on the next day.

14 I mean, they -- they were and they are a partner of ours,  
15 so we thought sort of the partnership thing to do would be to  
16 let them know.

17 **Q.** And was there any legal significance to your understanding  
18 of sending an advance copy of the patent and the draft  
19 complaint?

20 **A.** Yes. We were told that certain courts for certain types  
21 of infringement require --

22 **MS. BAILY:** I object.

23 **THE COURT:** Sustained. Sustained. I don't know  
24 what -- so what she's talking about certain courts, but I'm the  
25 one that's going to tell the jury what the law is on this.



1           **MR. RICHTER:** Understood. Withdrawn, Your Honor.

2           **BY MR. RICHTER:**

3           **Q.** And the draft complaint that was attached to your e-mail,  
4           what, if anything, concerning the '966 patent did that draft  
5           complaint contain?

6           **A.** It alleged patent infringement of the '966 patent.

7           **Q.** And can I have you turn to TX6136 in your binder?

8           **A.** (Witness examines document.)

9           **Q.** Okay. What is this document?

10          **A.** This is the complaint that was attached to my e-mail.

11          **MR. RICHTER:** And without publishing it just yet,  
12          Your Honor, we'd like to move TX6136 into evidence.

13          **THE COURT:** All right. What's the problem?

14          **MS. BAILY:** None, Your Honor.

15          **THE COURT:** All right. It's received in evidence with  
16          the redactions that I said you should make, and that will be  
17          done in due course before it goes to the jury.

18          (Trial Exhibit 6136 as amended received in evidence.)

19          **THE COURT:** Now, I need to -- just to give you a  
20          heads-up, this document is written by the Sonos -- from the  
21          Sonos point of view and it has a lot of statements that are  
22          allegations and statements about Sonos. Like Sonos is an  
23          American success story and it goes on to say how great Sonos  
24          is; and all that may or may not be true, but this is not proof  
25          of a thing. Whether Sonos is an American success story or not,

1 this doesn't prove it.

2 This is being offered, though, for one purpose and one  
3 purpose only, to show that one day before the lawsuit was filed  
4 Sonos gave this voluminous notice to Google, and including '966  
5 and a few other patents. You'll hear more about that in due  
6 course.

7 That's the only -- it's being offered to show notice.  
8 That's the only thing you can consider. You cannot consider  
9 these statements in here about infringement as proof that there  
10 is any infringement whatsoever, and that includes the claim  
11 charts at the end. There are claim charts. For all we know,  
12 this's full of hearsay.

13 So it's not admitted for any purpose other than to show  
14 notice of the patents and the allegation of infringement. I'm  
15 sure counsel will agree that that's the only purpose, but  
16 you've got to redact those things I told you to redact.

17 **MR. RICHTER:** Understood. Of course, Your Honor.  
18 Thank you.

19 And, Mr. Jay, can we -- permission to publish the claim  
20 chart portion of the '966 section, Your Honor? And if you'd  
21 like to look, that's page 67.

22 (Pause in proceedings.)

23 **THE COURT:** 67?

24 **MR. RICHTER:** Yes, Your Honor.

25 **THE COURT:** I believe I'm going to let you do that,

1 but let me just find 67.

2 (Pause in proceedings.)

3 **THE COURT:** Is this the '966?

4 **MR. RICHTER:** That's correct, Your Honor.

5 **THE COURT:** Okay. What you're about to see is what's  
6 called a claim chart. It is not proof of anything, zero, other  
7 than the allegations being made in this case and then in the --  
8 in the draft complaint were provided to Google one day before  
9 the lawsuit started.

10 So that is what -- and I'm not saying that -- and this  
11 cannot be considered as proof that it's true, but it's proof  
12 that notice of what Sonos was alleging was given one day prior  
13 to the lawsuit.

14 Okay. You can publish that to the jury.

15 **MR. RICHTER:** Thank you very much, Your Honor.

16 Yes, page 67 of this portion.

17 **BY MR. RICHTER:**

18 **Q.** And, Ms. Kwasizur, what does this chart set forth?

19 **MR. RICHTER:** And, Mr. Jay, actually, if we can scroll  
20 to -- from 67 to 78. I believe all those pages are the charts.

21 **BY MR. RICHTER:**

22 **Q.** And, Ms. Kwasizur, what's generally described here by the  
23 chart?

24 **A.** This is a claim chart which is laying out the claims of  
25 the '966 patent and how they're infringed by the Google

1 products.

2 **Q.** And this formed a part of the draft complaint that Sonos  
3 sent to Google on September 28, 2020?

4 **A.** Yes, correct. On the left you can see sort of the  
5 elements of the claim mapped out, and then on the right you can  
6 see what Sonos was purporting to be the evidence of the  
7 infringement.

8 **Q.** Thank you.

9 **MR. RICHTER:** And we can take that down, Mr. Jay.

10 Thank you.

11 **BY MR. RICHTER:**

12 **Q.** Ms. Kwasizur, how did Google respond, if at all, to your  
13 e-mail attaching the '966 patent and a copy of the draft  
14 complaint?

15 **A.** Well, they went to California court and filed their own  
16 declaratory judgment action saying that they did not infringe  
17 the '966 patent that same day.

18 **Q.** And did Sonos end up filing its draft complaint?

19 **A.** Yes. As my e-mail indicated, we filed it the next day in  
20 the Western District of Texas.

21 **Q.** And why did Sonos select the Western District of Texas to  
22 file that complaint on September 29, 2020?

23 **A.** Well, we wanted this whole thing to be resolved quickly.  
24 We're a smaller company and we have not as much resources, so  
25 we wanted to move quickly. And at the time the California --

1 this was the height of COVID still. The California courts  
2 weren't -- they were semi-operational and the Texas courts,  
3 Texas handled COVID quite differently than California. As most  
4 people know, they were fully operational and they were moving  
5 cases through quicker than California.

6 **Q.** And so other than the '966 patent, are there other patents  
7 mentioned in the draft complaint?

8 **A.** There are, yes.

9 **Q.** And what are those patents? What are the numbers of those  
10 patents?

11 **A.** So there's -- do you want me to read the full number or  
12 just how we refer to them?

13 **Q.** Yeah, how you would refer to them. I think by the last  
14 three digits is going to be sufficient.

15 **A.** Yeah, usually people refer to patents by the last three  
16 numbers. I don't know why. Sorry.

17 So it's the '615, the '033, the '206, the '966, and the  
18 '460.

19 **Q.** Okay. And the '966 is one of the asserted patents at  
20 issue here in this trial; is that right?

21 **A.** Correct, yes.

22 **Q.** And I think I heard you mention the '206 patent. Can you  
23 explain just generally what that patent is?

24 **A.** The '206 patent was another patent relating to zone  
25 scenes.

1 Q. And what about the '460 patent?

2 A. The 460 related to equalize -- sound equalization  
3 techniques.

4 Q. And what about the '615 and the '033 patents?

5 A. The '615 and '033 both related to direct control  
6 technology, which is -- well, direct control technology.

7 Q. And so those are four other patents.

8 And let me ask you: Why is the '206 and the '460 not at  
9 issue today in this trial?

10 A. Well, both of those were withdrawn. The '206 we had  
11 already added the '885 to this case, and so to sort of  
12 reserve -- it was similar -- similar technology, also zone  
13 scenes; and so to preserve some resources, we decided to let  
14 that one go because we felt it wasn't as strong as the '966 and  
15 the '885. So we withdrew it from the case.

16 And then the '460 we also withdrew from the case.

17 Q. And had there been some prior litigation in Texas  
18 concerning the '206 patent?

19 A. Yes. As I said, we filed in Texas and so, yes, there  
20 was -- some prior portions of the case had moved forward in  
21 Texas around the '206.

22 Q. And what indications, if any, had the prior court in Texas  
23 given with respect to the '206 patent?

24 A. The judge there in one of the hearings had sort of  
25 indicated that he might reverse a ruling that he had previously

1 held about the '206 patent, and it seemed to make it maybe less  
2 strong than the '885 and the '966; and so as a legal team, we  
3 decided we'll just go with our strongest patents, which we  
4 thought, again, were the '966 and '885. And so we withdrew the  
5 '206 from the case.

6 And then subsequently the case was transferred here -- or  
7 it might have been transferred and then we withdrew it. I'm  
8 not exactly sure of the order, but then the case was moved from  
9 the Western District to here so we never really got the outcome  
10 on Texas.

11 **Q.** And I think I heard you mention the '615 and the '033  
12 patents. And why are those patents not at issue in this trial?

13 **A.** Oh, they're completely -- oh, well, because they were  
14 found invalid by Your Honor.

15 **Q.** Do the '615 or the '033 patents have to do with zone scene  
16 technology?

17 **A.** No, no. They're -- they're a different technology.

18 **Q.** Okay. And what about the '460 patent? Does that have to  
19 do with zone scene technology?

20 **A.** No. That's equalization. That's totally different. As I  
21 was saying earlier, we have a lot of different areas that  
22 relate to audio sounds in our patent portfolio, and so those  
23 other ones are completely different technologies than zone  
24 scenes.

25 **MR. RICHTER:** Mr. Jay, can we bring up TX8240, please?

(Pause in proceedings.)

**MR. RICHTER:** I believe this one's in evidence,  
Your Honor.

**THE COURT:** It's already in evidence?

**MR. RICHTER:** Yes, sir.

**THE COURT:** All right. Then --

**MR. SULLIVAN:** Through the video, Your Honor.

**THE COURT:** But I've already said it's in evidence?

**MR. RICHTER:** Yes, Your Honor.

**THE COURT:** Okay. Great. Then I -- let's go ahead.  
It's already in evidence.

**BY MR. RICHTER:**

**Q.** Okay. Do you recognize this document on the screen and in  
your binder, Ms. Kwasizur?

**A.** Yes.

**Q.** What do you recognize it as?

**A.** This is the complaint that Google -- after they received  
my e-mail, they went to the California court and filed their  
own complaint for declaratory judgment -- that's when you ask a  
court to basically make a statement -- that they did not  
infringe the patents listed here on this complaint, including  
'206 and the '966.

**Q.** Can we flip to the end? I just want to ask you how many  
pages this document is.

**A.** Sure. It looks to be 13 pages, assuming the numeration at



1 the bottom is correct.

2 **Q.** Okay. And without showing it on the screen, Ms. Kwasizur,  
3 can you turn back to TX6136, which I believe is in evidence and  
4 is Sonos' draft complaint that it sent to Google? And I want  
5 to ask you how many pages that document is.

6 **A.** It is 67 pages, again assuming the pagination is correct  
7 on the bottom.

8 Oh, sorry. 87. So I have to take my glasses off.

9 **Q.** Okay. And one thing. I think I heard your testimony this  
10 morning, I had asked you if the Sonos Denon license covered the  
11 patents in suit and you had said that it did not.

12 Can we bring up -- actually, let me just ask you: Is it  
13 correct that the Denon license does not cover the patents in  
14 suit?

15 **A.** No, they didn't at the time we entered the license  
16 agreement because some of these patents weren't in existence,  
17 but the license itself does cover. As I said, any -- any new  
18 patents we got would automatically be covered by the license  
19 because it's sort of a portfolio-wide license.

20 **Q.** When in relation to time did the asserted patents in this  
21 case issue relative to the Sonos-Denon license agreement?

22 **A.** Years later.

23 **Q.** You're saying the issued patents issued years later?

24 **A.** Yeah.

25 **Q.** Okay.

1     **A.**     Correct.

2     **Q.**     Thank you very much.

3             **MR. RICHTER:**   At this time we pass the witness,  
4     Your Honor.

5             **THE COURT:**   Okay.   Before you step down, I want to say  
6     the same thing about this complaint by Google that I said about  
7     the Sonos complaint.

8             It is full of hearsay and self-serving allegations.   None  
9     of it can be taken for the truth because it's just an  
10    allegation.   For example, it has things like tooting their own  
11    horn, revolutionary, leading the world.

12            Okay.   No, you can't -- that's not -- you cannot consider  
13    that kind of puffery for any purpose in this case.   The only  
14    reason I'm allowing this document into evidence is to show that  
15    Google was at least aware of the patents in suit by -- at the  
16    time they filed this lawsuit.

17            And as I will instruct you later, under the rules, they --  
18    the lawyers had to have done an adequate enough investigation  
19    to be able to make these allegations in good faith.   So that  
20    implies that at least for some period of time, Google was aware  
21    of the patents in suit.   How long I don't know, and it's up to  
22    you to figure out.

23            But it goes to the issue of notice of the patents and  
24    whether or not the Plaintiff has proven there was willful  
25    infringement.   Infringement after this lawsuit started doesn't

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1 count for willful because now we're in the suit. But before,  
2 before if, if there was infringement and if it was valid and if  
3 all of those things, and it was done with knowledge of the  
4 patents, then there could be what's called willful  
5 infringement.

6 I'll tell you more about that later, but what I'm trying  
7 to do for you now is just set the stage and explain to you why  
8 you're even hearing about these complaints and lawsuits.

9 Okay.

10 **MR. RICHTER:** Thank you, Your Honor.

11 **THE COURT:** Are you done?

12 **MR. RICHTER:** Yes, I am.

13 **THE COURT:** All right. Now we go to the other side.

14 **MS. BAILY:** Can my colleague approach the witness,  
15 please?

16 **THE COURT:** Of course. Yes, please.

17 Baily will now cross examine.

18 **CROSS-EXAMINATION**

19 **BY MS. BAILY:**

20 **Q.** Good morning, Ms. Kwasizur.

21 **A.** Hi. Good. How are you?

22 **Q.** So we've heard from you about two complaints, one that  
23 Sonos filed in Texas and one that Google filed here; correct?

24 **A.** Correct, yes.

25 **Q.** And I want to draw your attention to TX8240. This is the

1 complaint for declaratory judgment of noninfringement filed by  
2 Google.

3 **A.** Sorry. Can you just say that number again?

4 **Q.** Sure.

5 (Pause in proceedings.)

6 **THE COURT:** While they're adjusting the mic, I want  
7 you to understand something because it went by us too fast.

8 There was a -- when the lawsuit got filed in Texas and  
9 then, of course one filed right here -- the system had to  
10 decide -- they were overlapping lawsuits -- the system, the  
11 judicial system, had to figure out why -- we can't have one in  
12 Texas and one here. So where should they -- where should they  
13 both go?

14 You know, in theory they could have gone to Delaware maybe  
15 or someplace else, but the system decided the Texas case should  
16 come here, and so both cases are actually being tried right now  
17 here.

18 We could have just as easily wound up with both cases in  
19 Texas and instead of you, a Waco, Texas, jury would be deciding  
20 this case.

21 So welcome to Patent Litigation 101. We could have been  
22 in Texas. No. We're in California and, God bless you, you're  
23 our jury that's going to decide this case.

24 But the main point is there's not going to be two  
25 lawsuits. There now is just one lawsuit and this is it.

1 Ms. Baily, continue please.

2 **MS. BAILY:** Thank you, Your Honor.

3 Thank you, Mr. Fisher. If we could just highlight --

4 **THE WITNESS:** Wait. Sorry. Can you repeat the  
5 number?

6 **MS. BAILY:** I apologize. It's TX8240.

7 (Pause in proceedings.)

8 **MS. BAILY:** Mr. Fisher, if we can just highlight the  
9 title "Complaint for Declaratory Judgment of Non-Infringement  
10 of Several U.S. Patents."

11 **THE WITNESS:** Okay.

12 **BY MS. BAILY:**

13 **Q.** Do you have that?

14 **A.** I'm with you now, yeah. Thank you. Sorry.

15 **Q.** That's okay.

16 The first patent listed there is 9967615. Do you see  
17 that?

18 **A.** Correct.

19 **Q.** And that patent was about networked music playback; is  
20 that right?

21 **A.** Yeah. We call it direct control but, yes.

22 **Q.** And it was issued by the government on May 8th, 2018. Do  
23 you recall that was the approximate date of issuance?

24 **A.** I don't know the date of issuance of our patents, but I  
25 assume you're telling me the truth, yeah.

1 Q. And Your Honor mentioned that this Court made a  
2 determination regarding the validity of that patent; is that  
3 correct?

4 A. That is correct.

5 Q. And the Court found that patent to be invalid?

6 A. Yes, that is correct.

7 Q. And the Court found that patent to be invalid as obvious.  
8 Do you recall that?

9 A. I don't know exactly what the ruling was. I'm not sure.  
10 I can't -- I'd have to read his ruling.

11 Q. Do you recall that the '615 patent was found invalid over  
12 certain Google prior art? Do you recall that?

13 A. I, again, would have to read -- I -- just to be clear, I  
14 don't work in our, like, litigation in the weeds. So I -- I  
15 would have to read his ruling to see exactly why it was ruled  
16 invalid. I just know it was ruled invalid.

17 THE COURT: Do we -- if she's not up to speed on it,  
18 it's going to waste the jury's time. Can't you in some other  
19 way prove up what the nature of the ruling was if that matters?

20 I mean isn't it enough to just say "The Court ruled that  
21 particular patent was invalid"? I think trying to argue with  
22 her over the nitty-gritty of the legal reasoning behind that  
23 is -- may take up too much time.

24 MS. BAILY: Understood, Your Honor.

25 \\\

1 **BY MS. BAILY:**

2 **Q.** Do you recall at least that with respect to the issue of  
3 the '615 patent, the issue that was decided by the Court  
4 related to the invalidity of that patent in relation to Google  
5 prior art? You don't recall that?

6 **A.** No. Again, I'm sorry, I don't. I don't know the details  
7 of the ruling.

8 **Q.** Okay. The next patent listed here is the 10779033. Do  
9 you see that?

10 **A.** Yes.

11 **Q.** The '033 patent was entitled "Systems and methods for  
12 networked music playback"; right?

13 **A.** Yes. Again, we call it direct control within the company  
14 but, yes.

15 **Q.** And it was issued by the PTO?

16 **A.** Again, I don't -- yeah. If you say so, yes, I believe  
17 you.

18 **Q.** You know your patent was issued; right?

19 **A.** Yes. I just don't know the exact date. Of course I know  
20 it's issued.

21 **Q.** And the Judge in this case ruled that that patent also was  
22 invalid; correct?

23 **A.** That's correct.

24 **Q.** The next patent is 9344206. Do you see that?

25 **A.** Yes.

1 Q. And that's a zone scene patent; right?

2 A. Yes, that is. It's -- yes, it is also a zone scene  
3 patent.

4 Q. It's called "Method and apparatus for updating zone  
5 configurations in a multizone system"; correct?

6 A. Yes, that sounds right.

7 Q. And the '206 patent has the same inventor as the '966  
8 patent, Robert Lambourne; correct?

9 A. Yes. I believe they're related patents so, yes.

10 Q. Sonos withdrew all its infringement allegations against  
11 Google regarding the '206 patent; right?

12 A. Yes, that's correct.

13 Q. And Sonos dismissed the '206 patent from this case with  
14 prejudice; correct?

15 A. Yes, that's correct.

16 Q. And that means Sonos can no longer assert the '206 patent  
17 against Google in any way; correct?

18 A. Yes, that's correct.

19 Q. And Sonos did that after the court in Texas said that it  
20 was going to find this patent invalid; correct?

21 A. Well, as I said earlier, there was a hearing in Texas  
22 where the judge had sort of indicated that he might reverse one  
23 of his earlier rulings about this particular patent; and so,  
24 yeah, given that we had the '885 in the case and that also was  
25 a zone scenes and we have '966, which is also zone scenes, we



1 decided to reserve some resources and just focus on the two  
2 that you now see in the case, '885 and '966, and we withdrew  
3 it.

4 **Q.** Do you recall that the Texas court was going to find that  
5 the claim terms "zone configuration" and "group configuration"  
6 were indefinite?

7 **A.** I wasn't at that hearing; but, yes, if you're telling me  
8 that, then, yes, that's -- yes, correct.

9 **Q.** And that's --

10 **A.** As I said, he was -- he was going to reverse something  
11 that he had said previously and so, yes.

12 **Q.** And let's skip to the '966.

13 The '966 patent is at issue in this case; correct?

14 **A.** Correct, yes.

15 **Q.** So the jury will decide whether Google infringes the '966  
16 patent?

17 **A.** That's my understanding, yes.

18 **Q.** And the jury will decide whether the '966 patent is valid  
19 or invalid?

20 **A.** I believe that's up to Your Honor; but, yes, I think  
21 that's what he will instruct them on.

22 **Q.** So moving on to the next patent listed in Google's  
23 complaint for declaratory judgment of noninfringement, it's the  
24 9,219,460?

25 **A.** Yes, I see it.

1 Q. And that patent is entitled "Audio settings based on  
2 environment"?

3 A. Yeah. That sounds right, yes.

4 Q. And Sonos withdrew its claim for infringement of the '460  
5 patent; is that correct?

6 A. Yes, that's correct.

7 Q. And that's because that patent was unenforceable; right?

8 A. No, that's not my understanding.

9 Q. Well, let me just -- so we've talked about the validity  
10 and -- strike that.

11 We've talked about the invalidity findings for the '615  
12 and the '033; right? Those were the patents that were found  
13 invalid in this court?

14 A. Yes, that's correct.

15 Q. And with respect to the '615, there was also a ruling that  
16 Google did not infringe that patent. Do you recall that?

17 A. Yes, that's correct.

18 Q. So in Google's complaint for declaratory judgment of  
19 noninfringement, there were five patents, correct, at issue?

20 A. Yeah. In the DJ, yes. Yes.

21 Q. And the '615 and the '033 were found invalid? Yes?

22 A. Yeah, yeah. You just stated that, yes.

23 Q. The '206 and '460 were withdrawn by Sonos; correct?

24 A. Correct.

25 Q. '615 was found not infringed by Google; correct?

1 A. Yes, I believe that's right.

2 Q. So what's remaining is for the jury to decide on the '966;  
3 right?

4 A. And '885 because we added it to the case; but, yes, that's  
5 correct, that's -- yes, that's what we're here for.

6 MS. BAILY: You can take that down, Mr. Fisher.

7 BY MS. BAILY:

8 Q. You mentioned that Sonos has between 1,000 and 1,500  
9 patents; is that right?

10 A. Yes, somewhere in there.

11 Q. Is that Sonos' global patent portfolio or U.S. patent  
12 portfolio?

13 A. Um, well we do have a global portfolio, but -- well, I  
14 think actually it probably answers both. Probably our global  
15 is still in there. It's probably maybe closer to 1,500. It  
16 might go a little over, but U.S., primarily U.S.

17 Q. So at least a thousand U.S. patents would you say for  
18 Sonos?

19 A. Yeah. Yeah. I don't know the exact number but, yes.

20 Q. And one of the licensing agreements you raised today was a  
21 January 2020 agreement between Sonos and Lenbrook; correct?

22 A. Yes.

23 Q. That was the Bluesound agreement?

24 A. Correct. Bluesound, yes.

25 Q. And that agreement was a settlement agreement that was

1 entered into after Sonos sued Lenbrook; right?

2 **A.** Yes, that's correct.

3 **Q.** And in that agreement Lenbrook received a license to  
4 Sonos' entire worldwide patent portfolio; correct?

5 **A.** The majority of -- yeah, a big chunk of our patent  
6 portfolio, yes. Not all.

7 **Q.** Is there something that was excluded from that patent  
8 portfolio?

9 **A.** Yeah. We generally don't include design, and I think  
10 sometimes we also don't include our voice, and actually our  
11 process now is to not include a new technology that we have for  
12 any new agreements; but, yes.

13 **Q.** All right. Let us just bring it up and get clarity on  
14 this.

15 **MS. BAILY:** So it's Exhibit 6632, please.

16 (Pause in proceedings.)

17 **BY MS. BAILY:**

18 **Q.** And if you go --

19 **A.** Oh, you know what? Sorry. Lenbrook was everything.  
20 Sorry. You're right. I correct myself.

21 Lenbrook we did end up putting in design at the last  
22 minute because they wanted it to be the full thing so, yeah.

23 **Q.** Thank you.

24 So through this agreement Lenbrook received a license to  
25 each and every one of Sonos' 1,000 to 1,500 patents; right?

1 A. Yes, that's correct.

2 Q. And I think earlier there were some royalty rates that  
3 were displayed to the jury. Do you recall that?

4 A. Yes.

5 Q. And the highest rate that was listed in the agreement is  
6 \$30 per unit, but that was for the entirety of Sonos' United  
7 States patent portfolio; right?

8 A. Can we pull up the page that shows the royalty rate? I  
9 think it was page --

10 Q. So you can just look in your binder. It's Exhibit 6632.

11 MS. BAILY: You can take that down, Mr. Fisher.

12 BY MS. BAILY:

13 Q. The highest rate listed in the agreement is \$30 per unit  
14 for the entirety of Sonos' United States patent portfolio;  
15 right?

16 MS. BAILY: Or if you had it, Mr. Fisher, you can  
17 bring it up.

18 THE WITNESS: Yeah. He just had it up.

19 Sorry. You said -- yes, the highest rate is \$30 per unit.

20 BY MS. BAILY:

21 Q. And Lenbrook never actually paid Sonos \$30 a unit for  
22 anything, did they?

23 A. I don't know. You'd have to -- I don't know. Sorry. I  
24 don't -- I don't actually see the payments come in. That's  
25 finance and accounting's department.

1 Q. In this case we're only talking about two patents; right?  
2 The '885 and the '966?

3 A. In this -- you mean the Google? Yes, correct.

4 Q. Yes.

5 A. Yes.

6 Q. And so that's about .1 percent of Sonos' worldwide patent  
7 portfolio that was licensed to Lenbrook in this agreement;  
8 correct?

9 A. I don't -- I haven't done the math, but I'll take your  
10 word for it. Yes, they had a patent portfolio.

11 Q. The royalty rates in the Lenbrook agreement were for 1,500  
12 patents, but what the jury is going to potentially think about  
13 in this case is .1 percent of that portfolio; right?

14 THE COURT: How do you get to .1? 2 out of 1,500,  
15 what is that?

16 MS. BAILY: That's right. I have a calculator,  
17 Your Honor. Should I do the math?

18 THE COURT: Let's do the math because I don't see how  
19 you get to .1. Because a thousand times 2 is 2,000. So I  
20 think it's going to be more like .15.

21 (Pause in proceedings.)

22 MS. BAILY: I brought a calculator.

23 THE COURT: Good. Okay. What is the answer?

24 MS. BAILY: The answer is --

25 THE COURT: 2 divided by 1,500.

1           **MS. BAILY:** It's .13.

2           **THE COURT:** Okay. .13. All right.

3           So are you okay with that math?

4           **THE WITNESS:** Yeah. I mean, I think patents --  
5 different patents have different values, and so I -- I actually  
6 doubt Lenbrook uses all 1,500 patents. I mean, there's no way  
7 they do.

8           So, yeah, they do have a portfolio license, but each  
9 patent sort of has its own value depending on what use cases a  
10 patent -- a licensee is trying to put to use.

11          **BY MS. BAILY:**

12          **Q.** But you agree now with the math that I've done on the  
13 calculator that the two patents is .13 percent of the worldwide  
14 portfolio to Lenbrook?

15          **A.** I do not disagree with the calculator and your math.

16          **Q.** And Lenbrook could and can use any of those 1,500 Sonos  
17 patents in their products; correct?

18          **A.** Yeah. I think there's some limitations on how they can do  
19 it; but, yes, generally they can -- if they want to use one of  
20 the 1,500, they are free to do. So that's the whole point,  
21 yes.

22          **Q.** Now, the terms of the December 2020 Sonos-Legrand  
23 agreement are pretty similar to the ones we just discussed;  
24 right?

25          **A.** Correct. If you're going to ask me specific to one, tell

1 me which one it is so I can look.

2 Q. Sure. It is TX6631.

3 A. (Witness examines document.) Yes, they are generally --  
4 6631.

5 They are similar. I think with Lenbrook it is not the  
6 full license. I think that's where we started carving out  
7 design, or I think that that one has some carve-outs. It  
8 might -- no. I think it's just the design.

9 Q. Okay.

10 A. So it's not the full portfolio but, yes, it's similar.

11 Q. Should we do the math again? How many patents would be  
12 eliminated? Would it be a substantial number of patents  
13 eliminated through the design patents?

14 A. No, not -- I don't know what percentage our portfolio is  
15 design -- sorry -- but maybe 10 percent. I'm guessing, though.  
16 Sorry.

17 Q. Okay. Still the two patents at issue in this case,  
18 obviously very small percentage of the portfolio license to  
19 Legrand; correct?

20 A. Yes. But, again, it depends on what technology they're  
21 trying to use as to sort of which ones they find to be the most  
22 valuable in the portfolio or how much value it is; but, yes,  
23 correct, they -- it's a small -- I agree, it's a small  
24 percentage of a bigger license.

25 Q. But just to be clear, Legrand can use any of the patents



1 that were licensed under this portfolio license, any Sonos  
2 patent?

3 **A.** Yes, they can. Yeah, they can use any. Yes, correct,  
4 with the exception of the design ones.

5 **Q.** Now, Legrand has actually paid Sonos under this -- under  
6 their agreement payments of about -- that total about \$200,000;  
7 correct?

8 **A.** Yeah. Like I said, I don't see when it comes in, but I  
9 checked a while ago and that would be in line with what I  
10 checked, but this was a while ago. But, yeah, something like  
11 that. I'm not exactly sure.

12 **Q.** So the total payments that Legrand has made to Sonos for  
13 more than a thousand patents has been \$200,000?

14 **A.** Yeah. I think Legrand was somewhere around there, and  
15 then the other one was a few million. So, yeah, I think that's  
16 right.

17 **Q.** And the Lenbrook agreement, Lenbrook paid Sonos for its  
18 portfolio license about \$1.5 million total; right?

19 **A.** Yeah. It was -- like I said, a few years ago I asked  
20 accounting like, "Hey, how much did we get?" And that sounds  
21 about right. I'll take your word for it. I'm sure you have  
22 evidence of it.

23 **Q.** Now, there was another set of royalty rates in these  
24 agreements -- in these agreements for products that were sold  
25 for less than a hundred dollars. Are you aware of that?

1 A. Correct.

2 Q. And for products sold less than a hundred dollars, the  
3 royalty rate for Sonos' entire portfolio, with the caveats that  
4 you made with respect to the second agreement, is \$6; right?

5 A. I'd have to look at what page that's on; but, yeah, that  
6 sounds right. The flat rate, yeah. I don't know exactly where  
7 it is; but, yes, that's right.

8 Q. And it's still \$6 for the entire portfolio; right?

9 A. Yeah. The reason we do that is because we don't really  
10 sell products that are sort of in the 50-dollar range, and so  
11 we don't view those people as competing as much with us; and so  
12 it's -- again, we try to be fair with our licensing, and so we  
13 felt like it was, like, a fair way to handle that, so...

14 Q. Are you aware that approximately 61 percent of the Google  
15 products accused of infringing the '885 patent are sold by  
16 Google for less than a hundred dollars?

17 A. I am not aware of that. Although if Google would like to  
18 pay us \$6, maybe that's something we could discuss.

19 Q. Well, just to be very, very clear, the \$6 is for the  
20 entire Sonos patent portfolio; right?

21 A. For these -- for these small competitors, I am aware that  
22 that's what these license agreements say, yes.

23 Q. Right. And with respect to Sonos' entire patent portfolio  
24 for products sold under a hundred dollars, Sonos charges a  
25 6-dollar rate?

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1 **A.** To these competitors who don't have the same ecosystem as  
2 Google does and doesn't -- don't make the same money on the  
3 products the way Google does, yes, that's correct.

4 **Q.** So if we were going to say anything about the \$6, we would  
5 have to take into account 1,500 patents; right? Not the two  
6 patents that are at issue here; right?

7 **A.** Well, like I said, we carve out voice and -- yes, I get  
8 your point. Yes, it's a bigger number.

9 **Q.** Now, you talked a little bit about the Denon lump-sum  
10 agreement; right?

11 **A.** Yes.

12 **Q.** And that's, if you want to reference it, at 6721.

13 (Pause in proceedings.)

14 **BY MS. BAILY:**

15 **Q.** Do you have it?

16 **A.** No, I don't.

17 **Q.** I think your Counsel might have handed it up separately.

18 **A.** I don't see it. Sorry.

19 **Q.** I think your Counsel might have --

20 **A.** Yeah, that was the one in the folder.

21 Well, go ahead. I kind of --

22 **Q.** The Denon license does not have running royalty; right?

23 **A.** That's correct. That one was a lump-sum payment, yes.

24 **Q.** And the Denon license was \$10 million for a license to all  
25 of Sonos utility patents worldwide?

1 A. For a period of four years, I believe, yes. That's  
2 correct, yes.

3 Q. That's right. So \$10 million for 1,300 patents?

4 A. Well, when it started, how many patents we had then, oh --

5 Q. Well, let me ask it different.

6 You're aware, right, that the portfolio license for Denon,  
7 that covers patents issued to Sonos after the agreement was  
8 executed? Correct?

9 A. Yes. As patents came into the portfolio, they had a  
10 license during the term for those patents, that's correct.

11 Q. So today how many patents are covered by the Denon  
12 agreement?

13 A. Well, the Denon agreement is expired today, so none.

14 Q. How many patents were covered by the Denon agreement in  
15 the four-year term of the agreement?

16 A. At the date it expired, I don't know. It is probably  
17 close to what we're at today, but I think we get about -- I  
18 don't know what the math would be -- maybe a couple -- a  
19 hundred, a hundred fifty less I'm guessing to when it expired.  
20 I'm not real sure. Sorry.

21 Q. Still \$10 million for more than a thousand patents; right?

22 A. Towards the end it was possibly more than a thousand. I'm  
23 going to guess when we first signed it, it was probably less  
24 than a thousand. Probably -- I don't know. Again, I'd have to  
25 look at our history. Maybe 700 when we first signed it, 600

1 when we first signed it; and then, you know, maybe we got a  
2 hundred a year so -- but, yeah, at the end probably over a  
3 thousand patents if that's -- yeah.

4 **Q.** Okay. So. Let's just do the math. Are you ready?

5 2 divided by 1,000. So that would be .2 percent. The two  
6 patents at issue here are .2 percent of the number of patents  
7 that were licensed to Denon in that portfolio agreement; right?

8 **A.** I was told there would be no math; but, yeah, I trust your  
9 calculator and I trust your math here. That seems right.

10 **MS. BAILY:** That's all, Your Honor.

11 **THE COURT:** Is that it?

12 **MS. BAILY:** Yes.

13 **THE COURT:** Okay. Now we go back to direct.

14 **MR. RICHTER:** Your Honor, is it okay if I ask a few  
15 follow-up questions?

16 **THE COURT:** Sure. Of course. Please go ahead.

17 **THE WITNESS:** Can I take a sip of water, sir?

18 **MR. RICHTER:** Yeah. Absolutely.

19 (Pause in proceedings.)

20 **REDIRECT EXAMINATION**

21 **BY MR. RICHTER:**

22 **Q.** Maybe we can pick up right where Ms. Baily left off.

23 I believe she was doing some math talking about the Denon and  
24 attempting to divide the amount of money that Denon paid Sonos  
25 by the amount of patents that Sonos would have.

1 But I believe your testimony earlier on the Denon license  
2 was that it was a cross-license. Can you explain a little bit  
3 more about how a cross-license works?

4 **A.** It was a cross-license, which is our preference. A  
5 cross-license is when another company also has some patents,  
6 you do basically a cross-license. You basically sort of  
7 evaluate each party's patent portfolio, determine the worth,  
8 and then figure out, you know, what is a fair way, who's paying  
9 who and which way it goes and what's fair based on both  
10 parties' patent portfolios.

11 **Q.** So am I correct that Denon paid Sonos money for the  
12 license and then Sonos received money and a license to Denon's  
13 patents? Is that right?

14 **A.** Yes, that's correct, yeah.

15 **Q.** And so is that a fair -- let me start over with my  
16 question. I'm sorry.

17 Is simply dividing the amount of money that Denon paid  
18 Sonos by the total number of Sonos patents really a fair  
19 approximation of the value of the Sonos-Denon license at that  
20 time?

21 **A.** No. You would have to factor in their patent portfolio  
22 and the cross-license as part of the value of course, yeah.

23 **Q.** And at the time of that Denon license, Denon was selling  
24 products competing with Sonos; right?

25 **A.** Indeed they were, yes.

1 Q. And do -- are you aware of what that per-unit equivalent  
2 is of the Denon license amount?

3 A. Am I aware -- sorry. Can you restate the question?

4 Q. Yeah. Sorry about that.

5 Are you aware what that lump-sum payment would translate  
6 into as a per-unit royalty equivalent? And if you're not,  
7 that's okay. I'm just asking if you're aware of that.

8 A. I think if you did the math, it was like \$35 or something.  
9 I don't remember off the top of my head, but I want to say it  
10 was like \$35 or something like that.

11 MR. RICHTER: Mr. Jay, do you mind if we pull up the  
12 Legrand agreement, which I believe is TX6631?

13 (Pause in proceedings.)

14 MR. RICHTER: And maybe a good page to look at is  
15 page 2.

16 BY MR. RICHTER:

17 Q. And so I don't think Ms. Baily showed you this page, but  
18 can I direct your attention to licensed patents?

19 And can -- would you read that for us, if you don't mind,  
20 Ms. Kwasizur?

21 A. Yeah. This is the Legrand agreement that we're reading.

22 Q. Yes.

23 A. (as read):

24 "'Licensed patents' means all utility patents owned  
25 or controlled by Sonos at any time during the term, but

1 excluding any of the Sonos patent portfolio related to  
2 concurrent voice technology; i.e., patents directed to  
3 concurrently operating multiple voice services on a single  
4 product offering or device" -- quote/unquote -- "excluded  
5 patents."

6 **Q.** And so is it a fair approximation of the value of this  
7 license to Sonos by just taking the licensing rates and  
8 dividing it by the total number of Sonos patents in Sonos'  
9 patent portfolio at this time?

10 **A.** No, definitely not the total. As I said, there were some  
11 carve-outs. This is -- the voice is obviously one of them as  
12 you're pointing out here and then the design ones are another.  
13 So it's not the total portfolio, no.

14 **Q.** I think Ms. Baily was also referencing some of the  
15 payments made from Legrand to Sonos, and she may have mentioned  
16 it was in the \$200,000 range or so. Do you remember those  
17 questions?

18 **A.** I remember those questions. Yes, I remember the  
19 questions.

20 **Q.** And is that amount of money that was paid from Legrand to  
21 Sonos a reflection of how many units Legrand sold?

22 **A.** Well, they paid a per-unit royalty so, yeah, in some ways  
23 it is a reflection of how much they sold, correct. As I said,  
24 earlier the reason we do per unit is if they sell less, they  
25 pay less, and that's maybe a good example that they didn't sell



1 as much.

2 Q. And so is it a fair statement that if Legrand would have  
3 sold more units, they would have paid more money to Sonos?

4 A. Yes, of course; and if they got into higher tiers, the  
5 rate would go up, as I explained earlier, because they'd be  
6 competing with us more.

7 Q. And that's a feature of the license agreement -- the  
8 running royalty portions of the license agreement, that's a  
9 feature of them; is that right?

10 A. Yeah. Yeah, yeah. That's how the agreements are set up.

11 Q. Same question with respect to the Bluesound agreements.  
12 I believe Ms. Baily was mentioning they may have paid on the  
13 order of 1 to 2 million. And that's a function of how many  
14 units Bluesound sold? Do I have that right?

15 A. Yeah, yeah. The number of covered products, you just  
16 multiply it by the tier that it falls in, and that's how they  
17 make the payments so, yes.

18 Q. Thank you for your testimony, Ms. Kwasizur.

19 MR. RICHTER: Pass the witness, Your Honor.

20 THE COURT: Thank you. Any more?

21 RECROSS-EXAMINATION

22 BY MS. BAILY:

23 Q. I just have a couple of questions.

24 A. Okay. A couple of answers.

25 Q. You talked with counsel about the Denon patent portfolio;

1 right?

2 A. Yes.

3 Q. You said that was a cross-license?

4 A. Yes.

5 Q. And you didn't present any historical valuation of Denon's  
6 patent portfolio; right?

7 A. I don't believe we did, no.

8 Q. And with respect to the Legrand agreement --

9 A. Yes.

10 Q. -- you talked about an exclusion for some concurrent voice  
11 patents. Do you recall that?

12 A. Yes. I just read that out, yes.

13 Q. And that's a small number of patents; correct?

14 A. I wouldn't call it small. I don't know the number off the  
15 top of my head; but, you know, as the rise of voice has  
16 happened, we also have paid attention and been innovating in  
17 that space particularly like it said in there where it comes to  
18 multiple voice agents and things like that.

19 Q. You didn't present any historical valuation of the  
20 concurrent voice patents; correct?

21 A. We don't -- we don't really have valuations of different  
22 segments of our patent portfolio so, no, I couldn't present  
23 that.

24 Q. And just coming back to the Lenbrook agreement, there was  
25 nothing excluded from Sonos' portfolio with respect to the

1 license that Lenbrook received; correct?

2 **A.** Yeah. I believe Lenbrook was the full portfolio. I would  
3 have to double-check. Yeah. I think that's right, yeah.

4 **Q.** So to get an average -- an average price per patent with  
5 respect to the Lenbrook agreement, you would have to multiply  
6 30 times 30-dollar rate. That would be the highest rate;  
7 right?

8 **A.** Sorry. Can you repeat the question?

9 **Q.** Yeah. Sure. It was confusing.

10 So in the Lenbrook agreement, the highest royalty rate  
11 that's even listed is \$30 per unit; right?

12 **A.** Yeah. I'm not going to look again. Yes, I trust you're  
13 right on that. Okay, yes, I'm with you.

14 **Q.** And we discussed the percentage that these two patents  
15 make up of the worldwide patent portfolio of Sonos; right?  
16 That was .13 percent?

17 **A.** As it sits today, yeah. It's rough math, yeah, because we  
18 don't have the perfect number; but, correct, yes.

19 **Q.** So if I do the math correctly -- I don't know if I will --  
20 that would mean each patent is worth less than 2 cents; right?  
21 Two cents per unit if you were to use the royalty rate in the  
22 Lenbrook agreement?

23 **A.** I'm going to assume your math is right; but, again,  
24 different patents have different value so, you know, I'm not  
25 sure -- it doesn't totally break down that way that just every

1 patent is two cents, but I get -- I get your point.

2 **Q.** Thank you.

3 **A.** Yes.

4 **THE COURT:** Okay. Thank you.

5 You may step down.

6 (Witness excused.)

7 **THE COURT:** Next witness.

8 **THE CLERK:** May the witness please approach the  
9 witness stand.

10 **MR. RICHTER:** Your Honor, before our next witness  
11 approaches, may we remove the devices, the demonstrative  
12 exhibits?

13 **THE COURT:** Sure. Let's do it. Yes, you may.

14 **MR. RICHTER:** I believe our next witness is Mr. James  
15 Malackowski, Sonos' damages expert.

16 **THE COURT:** All right.

17 (Pause in proceedings.)

18 **JAMES EDWARD MALACKOWSKI,**  
19 called as a witness for the Plaintiff, having been duly sworn,  
20 testified as follows:

21 **THE CLERK:** Thank you.

22 Please speak directly into the microphone. State your  
23 full name for the record and spell your last name.

24 **THE WITNESS:** James Edward Malackowski,  
25 M-A-L-A-C-K-O-W-S-K-I.

1           **MS. BAILY:** Your Honor, I apologize. There may be a  
2 very small portion of Mr. Malackowski's direct examination that  
3 relates to highly sensitive confidential financial information  
4 of Google.

5           And I understand that Sonos does not have an objection to  
6 sealing the courtroom at that time. I know that's not the  
7 Court's preference, but the -- this financial information  
8 doesn't affect an understanding of Mr. Malackowski's  
9 calculations, and so --

10           **THE COURT:** When will we get to that in this  
11 examination?

12           **MS. CARIDIS:** Your Honor, maybe in 15 to 20 minutes.

13           **THE COURT:** When we get there, let me know and then I  
14 will possibly excuse the jury so we can argue about this. I'm  
15 not saying yes or no to it yet.

16           **MS. CARIDIS:** May I proceed, Your Honor?

17           **THE COURT:** You can. Yes, you can.

18                           **DIRECT EXAMINATION**

19           **BY MS. CARIDIS:**

20           **Q.** Good morning, Mr. Malackowski.

21           **A.** Good morning.

22           **Q.** Can you please explain to the jury what your role is in  
23 this case?

24           **A.** Yes. I've been asked to provide my opinion and analysis  
25 for the amount of damages that I think should be awarded in the

1 event that you, the jury, find that the patents are valid and  
2 infringed. So the damages Google should pay to Sonos.

3 **Q.** Thank you.

4 And have you prepared a -- any materials to assist in  
5 introducing yourself and explaining your work in this case?

6 **A.** I have, and the Power deck is shown on the screen.

7 **MS. CARIDIS:** Your Honor, may I approach the witness?

8 **THE COURT:** Sure.

9 (Pause in proceedings.)

10 **BY MS. CARIDIS:**

11 **Q.** Can you please briefly tell us about yourself and describe  
12 your educational background?

13 **A.** Sure. So I grew up in Indiana in a very small town. I  
14 was the first in my family to go to college. I attended the  
15 University of Notre Dame where I studied accounting and  
16 philosophy.

17 Following graduation, I went to work, lived in Chicago  
18 with my family, two children. One just graduated from college  
19 and one just finished her sophomore year.

20 **Q.** And can you briefly describe your professional work  
21 history after graduating from Notre Dame?

22 **A.** It's summarized on the first slide that's shown, but real  
23 briefly I've essentially spent my entire career, now more than  
24 35 years, focused on the valuation of technology and the  
25 intellectual property patent rights, for example, that it

1 protects.

2 So back in the 1980s I started what was the first firm  
3 dedicated to that. We started with five and we grew to about  
4 300 before we sold that.

5 I then spent some time looking at investments in  
6 intellectual property, and then started my current firm  
7 Ocean Tomo right after my daughter was born. So 20 years ago.  
8 And today we have about a hundred people focused on the  
9 valuation and management of intellectual property.

10 **Q.** And can you describe a little bit more about the business  
11 of Ocean Tomo?

12 **A.** Sure. We're a hundred folks, as I mentioned. We're part  
13 of a larger organization that has about 1,500 engineers. So we  
14 work with the engineers to understand the technology and then  
15 apply the business valuation skills.

16 We do three things: Valuation in the courtroom, working  
17 with clients who own intellectual property to manage their  
18 portfolios for licensing or other reasons, and then we act as a  
19 broker.

20 So if you wanted to buy or sell a patent or a music  
21 copyright or a trademark, we would do that in a live auction or  
22 through a private sale process. Kind of like Sotheby's would  
23 sell art or you would buy a car at a car auction.

24 **Q.** And so sticking with your professional experience, have  
25 you taught any subjects relating to patent licensing or

1 damages?

2 **A.** Oh, sure. That's part of the job I enjoy the most,  
3 frankly.

4 So I teach people at the firm. I teach at a number of  
5 universities, including my alma mater Notre Dame; and then I  
6 teach a lot of lawyers at bar association meetings, and we talk  
7 about how to value intellectual property for litigation but  
8 also how to value it sort of in the real-world marketplace.

9 **Q.** So I think a moment ago you mentioned some work that you  
10 do outside of the courtroom or the context of litigation. Can  
11 you provide some examples of work that you've done in that  
12 context?

13 **A.** I'm often asked to either be a senior adviser or a member  
14 of the board to companies or other patent holders. Some  
15 examples you may know would be Ford Motor Company where we help  
16 to manage all of the intellectual property for Ford, Jaguar,  
17 Aston Martin, Volvo at the time. Small startup companies;  
18 universities such as the University of Chicago, School of  
19 Molecular Engineering; biotech firms. My new favorite is a  
20 boat manufacturer in Europe. So it's a wide diversity.

21 **Q.** And have you had any positions of industry leadership or  
22 recognition relating to the licensing of patents?

23 **A.** Yes. I'll touch on one of each.

24 Leadership, I ran the world's largest technology transfer  
25 professional association, which I know you never heard of.



1 It's called LES, Licensing Executive Society. But when I ran  
2 that group, which teaches people how to value patents or  
3 license them, we had 10,000 members in 32 countries. So it was  
4 a pretty big deal.

5 As far as recognition, the thing I'm probably proudest  
6 of -- you don't know this either -- there's actually an  
7 Intellectual Property Hall of Fame, a global Hall of Fame, that  
8 in its history has less than a hundred people, mostly Patent  
9 Office directors, actually a few presidents; and I'm the only  
10 valuation person that's been admitted. I think I'm number 96  
11 in the Hall of Fame.

12 **Q.** And have you ever been named as an inventor on any U.S.  
13 patent?

14 **A.** Oh, many times. I have 20 issued patents or so.

15 **Q.** And do you have any certifications relating to financial  
16 analysis?

17 **A.** Several. Two that are relevant here is, one I studied  
18 accounting, as I mentioned, so I am a CPA. I've been a CPA  
19 since the mid-1980s.

20 But I'm also a certified licensing professional. So  
21 that's someone who has training and experience in the valuation  
22 and transfer of intellectual property or technology, and I have  
23 that certification as well.

24 **Q.** And have you been qualified by courts as an expert in  
25 intellectual property damages licensing and licensing

1 negotiations in the past?

2 **A.** Yes, ma'am.

3 **Q.** And how many times?

4 **A.** I've sat in a courtroom like this or a tax court,  
5 bankruptcy court, international arbitrations, more than a  
6 hundred times.

7 **Q.** And is your compensation dependent upon the opinions you  
8 render or the outcome of this case in any way?

9 **A.** In no way, no, ma'am.

10 **Q.** Okay. So with that introductory background to the side,  
11 Mr. Malackowski, can you explain what you were asked to do in  
12 this case?

13 **A.** Yes. I show on the screen a very high-level summary.  
14 It's very simple: What is the amount of compensation or money  
15 that Google would pay to use the patented technology of Sonos?

16 And in our industry we refer to that as a reasonable  
17 royalty damages. The way I think about it is if you wanted to  
18 rent somebody's apartment, you have to pay them rent to use the  
19 apartment. Same thing here. If Google wants to use Sonos'  
20 patents, they have to pay rent or a royalty.

21 **Q.** And in the event that the Court or the jury finds that  
22 Google does not infringe the asserted patents, how would your  
23 opinions change?

24 **A.** It would change dramatically. If there is no  
25 infringement, there should be no award of damages at all.

1 I actually start my work by assuming the patents are valid  
2 and that they're infringed; but that's, I understand, a  
3 decision that the jury will make.

4 **Q.** And I believe you mentioned it a moment ago, but based on  
5 your analysis, what type of damages did you find would be  
6 appropriate in this case?

7 **A.** I believe the appropriate measure is the minimum  
8 requirement, which is a reasonable royalty or the rent that we  
9 spoke of. There are other measures that I considered that  
10 would be higher, but I'm trying to be conservative in my  
11 analysis.

12 **Q.** And what types of information did you study or rely on in  
13 reaching your conclusions in this case?

14 **A.** It was a lot. As I show on the screen here, I list the  
15 major components.

16 But in all of my work, it always starts at the same place,  
17 which is you have to read the patents. You have to understand  
18 generally what they cover. And I had the benefit of getting to  
19 talk to the Sonos employees, getting to talk to Dr. Almeroth  
20 and the technical experts. Lawyers help too to understand it.

21 And once I understand the technology, then I look for  
22 benchmarks: Are there similar patents that have been sold in  
23 the marketplace or that have been licensed that I can use as a  
24 starting point to value these patents?

25 So comparable technology, and that may be a patent

1 license. It may be other technology sold in the market. It  
2 may be a piece of software.

3 The other thing is, as an expert, I sign an agreement to  
4 keep everything confidential. So I get to actually look at the  
5 business records of both Sonos and Google, their accounting  
6 information.

7 Finally, I do my own research, my own homework.

8 And, lastly, Google has their own damages expert that  
9 you'll hear from and they have their own technical experts that  
10 you've already heard from, and I get to read their reports to  
11 make sure I'm not missing something as it relates to my work.

12 **Q.** Are your conclusions here based on any legal principles?

13 **A.** They are. And I'm not a lawyer or giving legal opinion,  
14 but we have to refer back to the bedrock principle of how to  
15 measure damages, which is shown on the screen 35 U.S.C. 284.

16 And I won't read it except to focus on what's highlighted  
17 in blue: Damages must be adequate to compensate for the  
18 infringement -- so there's a relationship between the extent of  
19 use in infringement and the number that you would encourage --  
20 but in no event, less than a reasonable royalty.

21 So that's that notion that what I'm going to talk about  
22 today is the minimum measure of damages. I could have  
23 calculated other methods that would have been greater.

24 **Q.** Can you just mention for us what -- you know, some of  
25 those other types of damages would be possible -- would be

1 potential?

2 **A.** Well, the most obvious one is called lost profits, which:  
3 Is if Sonos allows Google to use this technology, will that  
4 help Google to sell more speakers that would actually take away  
5 sales from Sonos? And if that happened, the damages would be  
6 greater.

7 Another example would be called price erosion. Maybe  
8 Google's use of the technology won't cause Sonos to lose the  
9 sale, but maybe Sonos would have to lower the price to keep it,  
10 and that would also be a measure of damage that I'm not  
11 including.

12 **Q.** So to be clear, though, you're not offering any opinions  
13 in this case relating to lost profits or price erosion;  
14 correct?

15 **A.** Correct.

16 **Q.** Okay. So what, if any, framework did you rely upon in  
17 supporting your reasonable royalty analysis and opinions in  
18 this case?

19 **A.** So in each of my work it comes down -- there's a few  
20 slides that I think are really central or important  
21 conceptually. This is one of them.

22 So obviously Sonos and Google did not come to an agreement  
23 and licensed the patents. If they did, we wouldn't be here.  
24 But what we have to do for a reasonable royalty is essentially  
25 go back and recreate what should have happened if both sides

1 sat down and actually did come to that agreement, and we call  
2 that a hypothetical negotiation. It's hypothetical because it  
3 never happened.

4 And, importantly, what I show on the screen is you have to  
5 assume both sides are reasonable and actually going to go come  
6 to an agreement. No one can sit down and Sonos can't say they  
7 want some really crazy high number and Google can't say they  
8 don't want to pay anything. They have to compromise and come  
9 up with a royalty.

10 **Q.** So I believe you mentioned that this is a common  
11 framework. How many times have you used this hypothetical  
12 negotiation framework before?

13 **A.** Hundreds, probably more than a thousand over the last  
14 30 years, plus I'm supervising a hundred people that are using  
15 it every day.

16 **Q.** Okay. Now I believe you mentioned some of them, but let's  
17 kind of get it all out there.

18 Are there any assumptions you rely on at the outset of  
19 this framework?

20 **A.** Yes. Aside from assuming the patents are valid and  
21 infringed, I have to understand when would this negotiation  
22 occur because the date could make a difference, maybe not but  
23 it could; and the date that's relevant is the date of first  
24 infringement for each patent.

25 In this case what we know is Google actually started

1 selling the accused products before the patents issued. So the  
2 first aligning date would be the date the patent was issued by  
3 the PTO. And you can see in the chart, for the '966 that would  
4 be November of 2019 and for the '885 that would be a year  
5 later, November of 2020.

6 The second assumption I already shared, patents are valid  
7 and infringed.

8 And the third one I already shared, you have to reach an  
9 agreement.

10 **Q.** Other than the hypothetical nature of the exercise, are  
11 there any other differences between the hypothetical  
12 negotiation and the real-world negotiations?

13 **A.** One other very significant difference. And, again, it  
14 goes back to common sense. If you were going to negotiate with  
15 someone to buy or sell something, you have information that,  
16 you know, you don't fully disclose. You hold that to yourself  
17 because you're trying to negotiate the best deal.

18 A hypothetical negotiation in the courtroom is different.  
19 All of the information is laid cards up on the table.  
20 Everybody knows essentially everything that is expected or  
21 reasonably knowable at the time of the negotiation. And that's  
22 important because that makes it easier to compromise because  
23 there is no hidden information.

24 **Q.** Okay. So what are the questions that drive the outcome of  
25 this hypothetical negotiation that you've been discussing?

1   **A.**    So in each and every case, they're going to be different;  
2   and so my practice is, after I go through all that wheel of  
3   information, is to sit back and say: Well, what are the issues  
4   that are going to help us understand what the right royalty  
5   rate should be?

6           Sometimes there are two questions. Sometimes it's a long  
7   list. In this case there were five key questions for me.  
8   We'll go through them, but it relates to competition,  
9   comparable technologies, how valuable the patents are, how  
10   these companies would share in that value, and if Google has  
11   any other alternatives.

12   **Q.**    Okay. So let's kind of focus on the first question first.

13           What is the importance of the competitive relationship  
14   between the two parties in this case?

15   **A.**    So the competitive relationship is really key for two  
16   reasons. One, conceptually. Put yourself in the place of  
17   Sonos for a minute. If you're going to license your patents to  
18   someone who only makes a few speakers a year or doesn't compete  
19   with you at all versus someone who is one of your lead  
20   competitors, who are you going to want more money from? The  
21   lead competitor because of all the risk that we talk about. So  
22   that's important.

23           And it's also important when we look at those comparable  
24   benchmarks. So if I'm looking at another license -- and you  
25   just heard testimony about several licenses -- I want to look



1 for licenses that are also with competitors, competitor to  
2 competitor. I'm not going to be interested in licenses that  
3 are with universities or nonpracticing entities because those  
4 rates aren't going to be appropriate for my negotiation.

5 **Q.** So turning to your second question on the screen here, can  
6 you explain the importance of comparable technologies and  
7 relevant value indicators to your work in this case?

8 **A.** Yeah. Let's go back to the notion of you want to rent an  
9 apartment, how much should you pay; and my daughter just went  
10 through this for her summer job.

11 Well, how much are other apartments in the building or in  
12 the building next-door or in any building walking distance  
13 that's usable to you?

14 And the same thing is true of intellectual property. If  
15 you want to know what a patent royalty rate should be, are  
16 there other patent royalty rates you can look to either for the  
17 companies or using general research, or are there other  
18 transfers of technology where the benefits of that transfer are  
19 similar and you could use that as a benchmark or starting  
20 point, and I looked at all of the above.

21 **Q.** And then turning to your question three, how does the  
22 importance of the patented technology fit in here?

23 **A.** Simple. More important. More valuable. And you can  
24 assess the importance by things like the extent of use. And  
25 also in complex products, like a smartphone where there may

1 be -- where there are hundreds of features, what are the  
2 features that are actually promoted in the market place?  
3 Because those tend to be more important than the ones that are  
4 not.

5 **Q.** So turning to question four, were you able to determine  
6 how Google values and shares the benefits of third-party  
7 technology here?

8 **A.** Yes. In every case imagine you're in this negotiation and  
9 you finally all agree that this patent will generate X dollars.  
10 You know how big the pie is. Well, now you've got to divide  
11 the pie. Well, how do you do that other than, you know, arm  
12 wrestling and argue about it? You try to look back to what the  
13 parties actually do in the real world every day.

14 And this case is unique because Google has built much of  
15 its business on working with other technology developers and  
16 sharing it at the app store and they have a very common  
17 standard, almost universal way of doing it, which is a 70/30  
18 split, and we'll talk about that in a little bit.

19 **Q.** And, lastly, did you find that Google would be able to  
20 design and implement any noninfringing alternatives that would  
21 be acceptable to customers here?

22 **A.** I did largely in working with Dr. Almeroth. You heard him  
23 talk about a couple of those alternatives yesterday, and Google  
24 has done their best to look for them; but Dr. Almeroth's  
25 conclusion was that they are not noninfringing commercially

1 acceptable alternatives, and so I take that into account in my  
2 work. There is no other option.

3 **Q.** Okay. So based on this information, would you please  
4 share with the jury your conclusions regarding the reasonable  
5 royalty due to Sonos?

6 **A.** Yeah. So the bottom line -- and we'll talk about how we  
7 get there -- in my opinion, the reasonable royalty, A, should  
8 be a running royalty. We just heard discussion of what that  
9 is.

10 Second, it ought to be slightly different for the two  
11 patents because, remember, those hypothetical dates are over a  
12 year apart and so that makes a difference.

13 Third, it ought to be for a specific time period. So for  
14 the '966 patent, it would be the date the patent issued,  
15 November 5th, 2019, through September 30th of last year. And  
16 the reason for the end date is only because that's the most  
17 recent accounting data that I have. The royalty rate for the  
18 '966 should be 82 cents a unit.

19 For the '885 it's similar. Running royalty starting with  
20 the date of issuance, a little bit different ending date  
21 because of the information I have. This one goes through  
22 November 15th of 2022. The rate is slightly higher because of  
23 that timing difference. It would be 87 cents a unit.

24 So, you know, when I teach class, I talk about chalkboard  
25 numbers, numbers that I go actually write down because they're

1 important. These are two chalkboard numbers.

2 **Q.** Okay. So if that's the conclusion, why don't we talk  
3 about how we get there? What process did you follow in  
4 determining the reasonable royalty due to Sonos?

5 **A.** One I use all the time. It's fairly straightforward. So,  
6 first, using my CPA or my certified licensing professional  
7 experience, what data do I have? What benchmarks can I start  
8 with that indicate value?

9 And then once I have those benchmarks, there's a list of  
10 factors that virtually every expert uses to see if those  
11 benchmarks should be adjusted upwards or downwards. Those  
12 factors are called the *Georgia-Pacific* factors only because  
13 back in the 1970s there was a court case where Georgia-Pacific  
14 was the Plaintiff, and that's where they first started using  
15 the factors.

16 But, importantly, once you understand the benchmarks and  
17 you consider the factors, it's really the expertise of the  
18 appraiser -- in this case me -- to determine how the parties  
19 would negotiate to a royalty.

20 There's no actual mathematical formula that you use. And  
21 at first that might sound unusual; but if you ever bought a  
22 house and you get an appraiser, what she'll do is she'll show  
23 three or four houses and she'll say "This one has a bedroom.  
24 This one has a pool. This one has a fireplace," and then she  
25 gives her opinion as to taking all that into account what's the

1 value of your house, and it's similar here.

2 **Q.** Can you explain -- are there multiple valuation approaches  
3 that are used to determine a reasonable royalty?

4 **A.** There are. The three most common approaches are shown on  
5 the screen. One is called the market approach. So what are  
6 other comparable technologies worth? If I want to know what my  
7 house is worth, what did my neighbor's house sell for?

8 Second is the income approach: Will this technology help  
9 you increase sales or profits or reduce your costs?

10 And, third, the cost approach. Google would argue: Is  
11 there some alternative we can use that would certainly be a  
12 factor to help lower the rate?

13 **Q.** And so I believe you mentioned that the market approach  
14 looks at what the parties would pay for technology that is like  
15 the asserted patents. Where can you find that information?

16 **A.** So you can look in a number of places. You can look in  
17 the business records and you can look in publicly available  
18 data. I'm going to change my analogy here but still keep in  
19 the home theme.

20 Let's suppose that the technology you want to acquire is  
21 you just moved into your new house and you need to mow the  
22 lawn. So you want to acquire technology of a lawn mower.

23 Well, you might get lucky and go to Home Depot and see  
24 exactly the lawn mower you want, you know what it's worth. But  
25 maybe you go to Home Depot and there's all kinds of lawn mowers

1 but nothing exactly comparable to what you want; too big, too  
2 little.

3 You also have the option of hiring a lawn service; and so  
4 you can look not only to comparable transactions, but  
5 comparable services.

6 And the same is true for intellectual property. You might  
7 find a comparable patent license, a comparable patent for sale,  
8 or a comparable technology for sale that accomplishes the same  
9 result.

10 **Q.** And can you explain what you investigated under the income  
11 approach?

12 **A.** Yes. So the income approach is fairly direct: What was  
13 the use and how valuable was it? So more products, greater  
14 usage, more revenue are all factors that would be considered.

15 This is probably the second-most important slide in the  
16 deck because it has two other chalkboard numbers that we need  
17 to know, and that is: What is the accused infringement for  
18 each of the patents being asserted here?

19 So for the '966, the accused infringement is represented  
20 by Google Home app installs, and I believe now the parties --  
21 the experts agree that that represents 94.7 million  
22 installations.

23 And then for the '885 patent, that represents the sales of  
24 the products, such as the Home, Nest, Chromecast, the speakers;  
25 and I believe here, again, the experts agree that represents

1 14.1 million sale transactions.

2 Q. And without going into any numbers at this point, has  
3 Google generated a significant amount of revenue based on the  
4 accused products?

5 A. Of course. Yes, ma'am.

6 Q. But has Google provided enough information to accurately  
7 quantify the amount of revenue that they have generated from  
8 the accused products?

9 A. Not completely because the revenue associated with these  
10 products comes from not only the sale but often they'll give  
11 away product, literally even giving away speakers or apps; and  
12 they also generate revenue from advertising and sale of data,  
13 and I don't have full information in that regard.

14 Q. So can you finally please explain the third valuation  
15 method, the cost approach?

16 A. Yes. Just a refresher. In a negotiation, if Google could  
17 do something else and pay less, obviously they're going to  
18 bring that to the table and they're going to argue that that  
19 should at least temper or lower the royalty rate.

20 Q. And would you expect the outcomes of all of these analyses  
21 to be identical?

22 A. No. They should all converge and be helpful, but they're  
23 all starting points that have to be considered in light of  
24 those *Georgia-Pacific* factors.

25 Q. Speaking of *Georgia-Pacific* factors, let's get into those.

1           So now that we've covered the three valuation approaches,  
2           what is the next step?

3           **A.**    So the next step is to look at those factors and now  
4           really dig into the detail. And so there are 15  
5           *Georgia-Pacific* factors. They can be generally grouped into  
6           three categories: Factors that relate to the licensing of  
7           technology, factors that talk about the importance of the  
8           invention, and factors that talk about the economics of the  
9           parties.

10          **Q.**    And which, if any, of these factors are relevant to this  
11          case?

12          **A.**    Well, they're all relevant. In every case you look to all  
13          of them. Some may not be so determinative or important to the  
14          outcome but, I've considered all 15.

15          **Q.**    So let's start at number one. Can you explain to the jury  
16          what the first *Georgia-Pacific* factor is?

17          **A.**    Yes. As shown on the screen, *Georgia-Pacific* factor 1 --  
18          and I'll probably start calling it GP1 -- talks about other  
19          licenses for the patents from the patent holder. So what  
20          evidence is there regarding Sonos' licensing history?

21                And what I show on the timeline here are actually the  
22          three licenses that we just heard testimony about: The Denon  
23          or DEI, the Lenbrook, and the Pass & Seymour license.

24          **Q.**    So in your opinion, are any of these agreements relevant  
25          to the economic terms of the hypothetical negotiation?



1   **A.**   Yes and no. They are relevant because they set a cap and  
2   they establish the form of payment; but as we just heard in the  
3   last testimony, they're for a larger portfolio so we have to  
4   apportion down from that.

5   **Q.**   And does the license Sonos granted to Lenbrook, which is  
6   this July 2020 box in your demonstrative, does that contain a  
7   license to the asserted patents?

8   **A.**   It does. And we just heard testimony highlighting that  
9   agreement and this chart, you know, summarizes some of those  
10  terms, yes.

11  **Q.**   And so what terms do you think are important or would  
12  inform a hypothetical negotiation in this case?

13  **A.**   Well, the whole agreement works together, but most  
14  importantly is the structure of the agreement. I won't repeat  
15  what we just heard, but it is a running royalty license. So  
16  you pay each and every unit. It's a portfolio license or I  
17  teach it -- I call it a buffet license. So if you go to lunch  
18  at the buffet and the buffet is \$35, you can pick whatever you  
19  want from the buffet.

20       But if you go and say "You know what? I'm just going to  
21  have the steak and I'll take -- you've got 30 entrees divided  
22  by \$30. Can I just pay a dollar on each steak?" No, you  
23  can't. That's not the way the buffet works. And so this is a  
24  similar structure to that agreement.

25  **Q.**   Are there any other relevant economic terms in the

1 Lenbrook license?

2 **A.** The Lenbrook license has one very unique term that's not  
3 in the others. It's generally referred to as a most-favored  
4 licensee clause. They call it a discounted royalty.

5 What that means is Sonos has promised Lenbrook that they  
6 will not give any other company in a similar situation a better  
7 deal. And that's important for here because in this  
8 hypothetical, Sonos has got to be thinking all the time, "Look,  
9 Google, you may want that but I can't give that to you because  
10 it would violate other agreements that I have."

11 **Q.** Let's turn to Sonos' second license. What are the  
12 relevant economic terms of Sonos' license with Legrand or  
13 Pass & Seymour?

14 **A.** They are essentially identical. They are a portfolio  
15 buffet license running royalty. Rates escalate with volume to  
16 discourage those large competitors from having a free ride.

17 **Q.** And I believe earlier you mentioned a third agreement with  
18 DEI or Denon. What impact, if any, did that have in your  
19 analysis?

20 **A.** Correct. I did not consider Denon to be relevant. We  
21 heard testimony that the effective rate is similar, 35 or \$30,  
22 but it was settled after litigation and it was compressed in  
23 time. There was no ability to renew it into the future and the  
24 other agreements allow you to do that, so the other agreements  
25 are much more consistent with hypothetical negotiation.

1 Q. Okay. So turning back to the Legrand and Lenbrook  
2 agreements, what effect would those have on the hypothetical  
3 negotiation between Sonos and Google here?

4 A. In my opinion they tell us, one, that this should be a  
5 running royalty and not a lump sum; and, two, they set the cap  
6 for the running royalty amount. And so the negotiators would  
7 start to negotiate some percentage of that approximate cap of  
8 \$30 on down.

9 Q. I believe a couple minutes ago you mentioned a concept of  
10 NPE or nonpracticing entity. Do you recall that?

11 A. Yes, ma'am.

12 Q. Can you expand on what you mean by nonpracticing entity  
13 and how that might factor into the parties' discussions here?

14 A. Yes. This is actually one of those charts that's also  
15 really important because, as we'll see, Google has a number of  
16 patent licenses, they've actually bought a number of patents,  
17 and the amounts in those agreements are relatively small.

18 And so when I started to read those, it's like: What's  
19 going on here? How come this big company is paying so little  
20 for all this technology? And what I realized is they were  
21 buying patents from nonpracticing entities or licensing from  
22 nonpracticing entities either by themselves or as part of a  
23 group. So what this chart explains to you is why that makes a  
24 difference.

25 So let's assume that you are sitting down cross from a

1 competitor and you want to license your technology versus  
2 sitting across the table from a NPE, a nonpracticing, maybe an  
3 individual.

4 Well, you're going to have to think about your pricing  
5 pressure. If you license a competitor to use your technology,  
6 that may come back to bite you and you might have to lower your  
7 price. If you're licensing your neighbor next-door for  
8 whatever reason and he doesn't sell your products, you don't  
9 have to worry about it.

10 The same is true for market share. If you license a  
11 competitor and they're using your technology to compete, that  
12 may come back and create risk.

13 And the same is true for reputation. If you work to  
14 develop a new feature that you're going to market to the public  
15 as "Come to my business to get this and get this here" but then  
16 all of the sudden your competitor has it and maybe your  
17 competitor actually got to market first, well, that's hugely  
18 damaging to your professional reputation.

19 And the results of all three of those factors is what?  
20 You want a higher rate from a competitor than you do from a  
21 nonpracticing entity. And for our purposes today, it means we  
22 need to take all those NPE agreements and set them aside. They  
23 should not be the basis of this negotiation. We need to look  
24 to the competitor-to-competitor rates.

25 **Q.** So you mentioned that you looked at some Google

1 agreements; right?

2 **A.** Yes, a number.

3 **Q.** So it's fair to say that Google had technology agreements  
4 that you reviewed?

5 **A.** Yeah. That's actually *Georgia-Pacific* Factor Number 2.  
6 So if we put that up on the screen, here are five of those  
7 agreements.

8 And what I noted is whether they would be relevant. If  
9 they're not, I put a red X. I put the reason why they would  
10 not be relevant, and you can see in each case it's largely  
11 related to this NPE factor.

12 I also have for a couple of them via IIF. Those are  
13 cooperative buying. A bunch of companies get together and they  
14 go buy one patent and then they only pay for their part. So  
15 that obviously reduces the rate as well.

16 But I also looked at what the Google expert said, and he  
17 agreed with me on all but one. There's one that he thought the  
18 technology was so similar that it should be considered. So I  
19 did take a second look at that one.

20 **Q.** In your opinion, does Google prefer to purchase or license  
21 patents?

22 **A.** Oh, Google's perspective is they would prefer to purchase,  
23 though, in fact, they do both. They'll try to purchase them if  
24 they can, largely from those nonpracticing entities; but for  
25 really important technology, say standard essential technology,

1 they're publicly listed as paying running royalties.

2 **Q.** So I notice on the screen here there's one green check  
3 under the Google expert column for Outland Research. Did you  
4 find anything significant in your review of the Google  
5 agreement for Outland Research?

6 **A.** Yes. The Google experts said they were similar from a  
7 technology point of view so I sat down with Dr. Almeroth and we  
8 went through it. And what I noted as to what the technology  
9 was, it was a game controller or a computer input device such  
10 as your cell phone --

11 **MS. BAILY:** Your Honor?

12 **THE WITNESS:** -- that can be used for --

13 **THE COURT:** Wait a minute.

14 What's the problem?

15 **MS. BAILY:** This is outside the scope.

16 Mr. Malackowski does not offer an opinion on technical  
17 comparability.

18 **THE COURT:** Is this in your report?

19 **THE WITNESS:** I do refer and discuss this in my  
20 reliance --

21 **THE COURT:** You can read from your report on this  
22 point, but you cannot give new testimony that's not in your  
23 report.

24 **THE WITNESS:** Yes, sir.

25 **THE COURT:** And the same ground rule applies to you on

1 the Google side.

2 All right. So if it is in the report, you can read what's  
3 in your report on that point.

4 **MS. CARIDIS:** We can move on from that so I don't have  
5 to pass up a --

6 **THE COURT:** All right. Would be a good point to take  
7 a break?

8 **MS. CARIDIS:** Sure.

9 **THE COURT:** All right. We will take a break now.  
10 Please remember the admonition.

11 **THE CLERK:** All rise for the jury.

12 (Proceedings were heard outside the presence of the jury:)

13 **THE COURT:** The witness can step down and take a break  
14 too.

15 What is the issue with the number you want me to keep from  
16 the public?

17 **MS. BAILY:** It's internal confidential financial  
18 information by product, also financial information related to  
19 unaccused products, and also --

20 **THE COURT:** Can I see -- is there a document that  
21 relates to this?

22 **MS. CARIDIS:** There's a single demonstrative slide,  
23 Your Honor.

24 **THE COURT:** Can I see that too?

25 **MS. BAILY:** Your Honor, there's two issues here.

1 There's the confidentiality issue and then we have a  
2 substantive objection that all this revenue unrelated to the  
3 accused products is coming in, like search revenue.

4 **THE COURT:** I don't see any financial information on  
5 the screen.

6 **MS. CARIDIS:** I handed you a paper copy, Your Honor,  
7 so that we weren't publishing something Google has an issue  
8 with being public.

9 **THE COURT:** Oh, all right.

10 (Pause in proceedings.)

11 **THE CLERK:** Well, I -- which part of this is so  
12 sensitive nobody can see it?

13 **MS. BAILY:** All of the search revenue broken down by  
14 paid distribution, but broken down by various categories:  
15 Percent total of play and search revenue.

16 Search revenue shouldn't even be coming in, Your Honor.  
17 Search has absolutely nothing to do with this case, and  
18 Your Honor already ruled that unaccused product revenues would  
19 not come in, I believe.

20 **THE COURT:** Well, which part of this do you think is  
21 relevant?

22 **MS. CARIDIS:** Your Honor's order during the motions in  
23 limine specifically said that Sonos and Mr. Malackowski could  
24 rely on Google's financial information to establish loss leader  
25 or lock-in effects that Google uses to purposely lower the



1 price of its products, lower the profits of its accused  
2 products, but generate revenue and profit for other products.  
3 This is exactly what Your Honor ruled would be admissible  
4 during the pretrial conference.

5 **MS. BAILY:** Your Honor, in their MILs, Sonos says  
6 "Sonos agrees not to reference financial information unrelated  
7 to the accused products."

8 **THE COURT:** Is that right?

9 **MS. CARIDIS:** We are not relating -- we are not  
10 referring to this as any sort of royalty base, Your Honor. We  
11 have always said and Your Honor specifically said that we can  
12 rely on -- on revenue and profitability numbers of Google to  
13 show Google's loss leader and lock-in effect strategies.

14 **MS. BAILY:** Your Honor --

15 **MS. CARIDIS:** I can point, Your Honor --

16 **THE COURT:** Didn't you say you were going to tie it  
17 into the accused products?

18 **MS. CARIDIS:** Your Honor, it is tied into the accused  
19 products. What you're looking at is Pixel revenue. Pixels are  
20 the phones that are accused of infringing in this case. So  
21 this is revenue directly related to the hardware devices that  
22 are accused in this case.

23 **MS. BAILY:** Your Honor, this refers to search revenue  
24 and play revenue. And obviously, you know, the Google Play  
25 Music the YouTube Music, all of that is not in this case.

1           **THE COURT:** Well, the Pixel is the phone itself, isn't  
2 it?

3           **MS. BAILY:** The Pixel is the phone itself.

4           **THE COURT:** All right. The search revenue I assume is  
5 coming from advertisers; is that right?

6           The ordinary consumer like me, if I had a Pixel, I  
7 wouldn't be paying for search. Somebody else pays for the  
8 search; right? That would be the advertisers.

9           And Play, what is Play? Is that YouTube? What is that?

10          **MS. BAILY:** Play is the Play Store the app store,  
11 I believe, but it's not my demonstrative.

12          **THE COURT:** I don't think we should be getting into  
13 search revenue.

14          **MS. CARIDIS:** Your Honor, may I read back something  
15 that you said during the pretrial conference?

16          **THE COURT:** Yes. Go ahead.

17          **MS. CARIDIS:** Sorry. This is first something that  
18 Mr. Richter said. Mr. Richter said (as read):

19               "I will point Your Honor to the fact that  
20 Mr. Malackowski also relies on the financial data provided  
21 by Google to explain that Google loses money on some of  
22 the accused products."

23          You said (as read):

24               "That's okay. That's okay, if it's got a legitimate  
25 basis there."

1 And then you continue to ask Mr. Judah (as read):

2 "Do you have any problem -- it's okay for them to say  
3 Google loses money and is a loss leader and all of that.  
4 Well, what's wrong with that?"

5 Mr. Judah responded (as read):

6 "One, I fully agree that when there's actually facts,  
7 like the actual financial data, that that's something that  
8 can be introduced and relied on; but the characterizations  
9 of that, that there's, therefore, a strategy which is  
10 based purely on *ipse dixit* of the expert is different."

11 You said (as read):

12 "That's okay. That's what the expert's bought and  
13 paid for."

14 So, Your Honor, in this case we suspect, based on the  
15 expert reports, that Google is going to come in and say that  
16 the royalty rates should be lower because Google does not  
17 generate a significant amount of profit from the accused  
18 products.

19 And here we are showing that Google has a strategy of a --  
20 Google has a loss-leader strategy, a lock-in strategy, of  
21 reducing the profits on the hardware products that are accused  
22 in order to then generate search or play revenue or other  
23 revenue on those exact products, which is what that slide  
24 demonstrates.

25 **MS. BAILY:** Your Honor, the general concept can be

1 stated, but these numbers clearly skew the damages horizon for  
2 the jury. They're not relevant and they're extremely  
3 prejudicial and sensitive.

4 **THE COURT:** I thought when I made the thing about loss  
5 leader, I thought we were referring to somehow Google was  
6 selling the accused products for less than they were worth.  
7 The accused product is the Home app. How much does the  
8 customer pay for the Home app?

9 **MS. BAILY:** It's free, Your Honor.

10 **MS. CARIDIS:** Your Honor, the accused product, recall,  
11 is the actual hardware devices. So in this example, the Pixel  
12 phone itself.

13 **MS. BAILY:** I mean, Your Honor, the phone --

14 **THE COURT:** Why would that be relevant? Explain how  
15 it ties into the *Georgia-Pacific* factors again.

16 **MS. CARIDIS:** Your Honor, I believe that's partly  
17 Mr. Malackowski's charge; but in general, if an accused product  
18 generates additional revenue, indirect revenue, so if the sale  
19 of a product -- razor blades is a great example. You can sell  
20 a razor with the expectation that a consumer is going to  
21 continue to buy razor blades into the future. So you should be  
22 at least aware of the fact that not only -- not only the price  
23 and the revenue and profit relating to the razor itself but  
24 also the future revenue and profit that will be realized as a  
25 result of the sale of that razor through the razor blades in

1 this example.

2 **MS. BAILY:** Your Honor, this is totally different from  
3 a razor blade example and there's no foundation for it.  
4 There's no economic analysis in Mr. Malackowski's report that  
5 would justify putting up these huge numbers and tying it to the  
6 Home app.

7 **THE COURT:** Why can't he say this, though, he --  
8 something along the lines of: Look, Google gives this product  
9 away for free? If you buy the Pixel, you get it for free; and  
10 the reason Google does that is so that there will be all these  
11 phones out there and they can make money off the search revenue  
12 and all the other ways that they make money. And so it's worth  
13 it to Google to have a -- to saturate the market with the  
14 reason that Google would be willing to give it away for free,  
15 is that it's going to make the money in -- money in other ways.

16 **MS. BAILY:** You would have to actually have an offer  
17 of proof with respect to that.

18 **THE COURT:** Well, this is it right here.

19 **MS. BAILY:** The Home app connected to billions of  
20 dollars in search revenue?

21 **MS. CARIDIS:** Your Honor, the total amount of money  
22 collected by Google through the accused products, which is the  
23 Pixel device, is relevant to the amount that the parties would  
24 be discussing at the hypothetical negotiation.

25 **THE COURT:** Tell me this: Does -- do you know from

1 public figures, from the SEC for example, what the annual  
2 profit is of Google?

3 **MS. CARIDIS:** I'm sure that we can search for it over  
4 the break; but, Your Honor, I think just we were trying to  
5 be -- we were trying to tie this to the facts because the  
6 revenue there is specific to the Pixel devices that are accused  
7 in this case. If we look at Google's SEC filings, if we look  
8 at their global profit or even their U.S. profits or revenues,  
9 it's going to be more than just what is tied to the accused  
10 products here.

11 **MS. BAILY:** Well, that's exactly right, Your Honor.  
12 To do this kind of analysis, the products that you're bringing  
13 in have to be functionally related to the products that are  
14 accused, and there's been no showing of that here.

15 And, Your Honor, all of these numbers, including the ones  
16 that Your Honor referenced, I mean, those would be extremely  
17 prejudicial and solely skew the damages horizon for the jury.

18 The argument itself is okay, Your Honor, if you're leaning  
19 that way; but the publication and the publishing in open court  
20 of these financial numbers, we object. There's been no  
21 evidence anyone buys a Pixel because it has a Home app on it.

22 (Pause in proceedings.)

23 **THE COURT:** I'm not going to decide -- for the time  
24 being, don't use this document. As I hear the rest of his  
25 testimony, I might change my mind.

1 I'm worried that Google is trying to flimflam me and that  
2 whenever I hear your damages expert, you'll say there's no  
3 evidence and then this would have been the evidence, and then  
4 you got me excluding. So I don't want to -- I don't want to be  
5 party to that kind of a gimmick.

6 But I think your point in a single sentence, Google's  
7 point, is that it would be fantastic to assume -- or too  
8 fantastic to assume that people buy the Pixel simply because  
9 there is the Home app; that they would probably sell 98 percent  
10 of the same number if it didn't have the Home app and,  
11 therefore, getting into all these extra numbers is just laying  
12 a lot of big numbers in front of the jury.

13 So I -- I'm going to -- that's my ruling for now, but I  
14 may change my mind before it's over.

15 Now, I want to understand. I want you to tell me  
16 something, Ms. Baily. In closing argument and anywhere else in  
17 this case, are you going to say something like, "Well, there's  
18 no proof of any loss leader"?

19 **MS. BAILY:** No.

20 **THE COURT:** Are you going to prove --

21 **MS. BAILY:** Nobody's analysis is actually based on  
22 this, Your Honor.

23 **THE COURT:** What?

24 **MS. BAILY:** Nobody's analysis is based on this.  
25 Mr. Malackowski's analysis is based on IFTTT. Our expert's

1 analysis is based on other things. This is not relevant to  
2 anything.

3 **THE COURT:** I'll wait till the end and maybe even the  
4 redirect before I make a decision on this; but for now, it's  
5 not going to be used.

6 **MS. CARIDIS:** Your Honor, just so that I understand  
7 your ruling as we're going -- as we continue this direct, can  
8 Mr. Malackowski, without putting the slide up, say generally  
9 that Google generates additional revenues from services in  
10 connection with its Pixel devices without publishing or saying  
11 out loud the number or the scale of the number?

12 **THE COURT:** All right. He can do that much.

13 **MS. CARIDIS:** Thank you, Your Honor.

14 **THE COURT:** Now, I want -- I just want to remind you  
15 on the IFTTT, as I said earlier, I'm going to listen carefully  
16 to everything he says about it and the cross-examination, but  
17 there is a substantial chance I'm going to say to the jury  
18 eventually "Disregard everything on IFTTT."

19 **MS. CARIDIS:** I understand that, Your Honor.

20 **THE COURT:** I'm giving you a chance to make the best  
21 record you can on that, and -- and if it -- you know, this is  
22 not inflammatory. If I say disregard it, the jury will be able  
23 to do that. And I assume he's got other bases for his  
24 testimony.

25 So all right. We will --



1           **MS. BAILY:** Just so you're aware, the only numbers  
2 that Mr. Malackowski puts forward are based at foundation on  
3 the IFTTT.

4           **THE COURT:** Well, I have a feeling maybe, but the jury  
5 has seen these other agreements. The jury may be able to come  
6 to its own conclusion about what the right number should be.

7           **MS. BAILY:** Yes, Your Honor.

8           **THE COURT:** We're going to take a few minutes  
9 ourselves.

10          **THE CLERK:** Court is in recess.

11                   (Recess taken at 11:32 a.m.)

12                   (Proceedings resumed at 11:43 a.m.)

13          **THE CLERK:** All rise for the jury.

14                   (Proceedings were heard in the presence of the jury:)

15          **THE COURT:** Welcome back. Be seated.

16                   Please, the floor is yours.

17          **BY MS. CARIDIS:**

18          **Q.** Welcome back, Mr. Malackowski.

19          **A.** Thank you.

20          **Q.** Before the break, we were talking about the Google  
21 Outland Research agreement. Do you recall that?

22          **A.** I do.

23          **Q.** How, if at all, would the Outland Research Google  
24 agreement affect the hypothetical negotiation in this case?

25          **A.** It would not be an effect in the negotiation largely

1 because it would be an NPE-based agreement; and when buying  
2 licenses from an NPE, the rates are lower, noncompetitive.

3 Q. So then what effect would the information under  
4 *Georgia-Pacific* Factor Number 2 have on the hypothetical  
5 negotiation?

6 A. In this case there would be no import to *Georgia-Pacific*  
7 Factor Number 2 because there are no licenses from Google or  
8 patent acquisitions from Google that would be relevant to the  
9 negotiation.

10 Q. I believe we have an old version of the slides on the  
11 screen here, so I apologize.

12 I believe the next factor is *Georgia-Pacific* Factor  
13 Number 3 as opposed to the Number 2 on the screen here.

14 But can you please explain the meaning of *Georgia-Pacific*  
15 Factor Number 3?

16 A. Yes. GP3 just talks about the nature of the license and,  
17 importantly, whether it would be exclusive, meaning only  
18 available for Google in this case, or whether it's a license  
19 that would be generally available.

20 You have to look at what the benchmarks tell us. The  
21 benchmarks from Sonos are nonexclusive. They license to  
22 multiple parties. And the hypothetical negotiation would be  
23 nonexclusive. So that would generally result in a lower rate.

24 Q. Okay. And turning to *Georgia-Pacific* Factor Number 4, can  
25 you explain what that factor is?

1     **A.**     *Georgia-Pacific* Factor 4 talks about the policy of the  
2     patent holder and whether they sought to control their  
3     portfolio, license it when needed, or generally not license it.

4             And as we heard the testimony earlier today, although  
5     Sonos has licensed the portfolio, they've only done so when  
6     they thought there was infringement in order to curtail the  
7     infringement and in the context of litigation.

8             In fact, what I show on the screen is one of the press  
9     releases they issued after reaching the agreement with  
10    Lenbrook. And if you look to the bottom of the press release,  
11    it tells you they will consider licensing, but they want to  
12    make sure that those licenses provide appropriate compensation.  
13    Very consistent with what we've discussed.

14    **Q.**     Okay. So let's turn to the next *Georgia-Pacific* factor,  
15    and I think this is one under the economics column of your  
16    chart.

17            How does the competitive relationship between the parties  
18    affect the negotiation outcome here?

19    **A.**     This one is more important. This shows that it is a  
20    competitor-to-competitor hypothetical negotiation. Sonos and  
21    Google do compete. Well, how do we know that? I was able to  
22    go back and look through the Google business records, and I  
23    found several records where they talk about the competition  
24    with Sonos. And Sonos says similar.

25            What I show on the screen are specific documents from

1 Google where they're comparing themselves to Sonos, and the  
2 easiest part of all is the right side of the screen where they  
3 simply show the Sonos products and the product that they think  
4 from Google is the competitive product.

5 So clearly this is a competitor-to-competitor situation.  
6 The royalty should be higher.

7 **THE COURT:** What does -- help us understand. What  
8 is -- what product do they compete in or did they compete in?

9 **THE WITNESS:** Your Honor, there are generally two  
10 classes of products. There are the entry-level products, which  
11 are the Sonos Play 1 and the Google Home. Those are the  
12 products that sell for a hundred to \$200. You see those on the  
13 left side.

14 **THE COURT:** Are those speakers?

15 **THE WITNESS:** They are speakers, yes.

16 **THE COURT:** Okay. And?

17 **THE WITNESS:** And then there are also premium  
18 speakers, Your Honor, and they compete with those as well.

19 **THE COURT:** Now, I think I heard some testimony to the  
20 effect that Google got out of the speaker market. Did you hear  
21 that?

22 **THE WITNESS:** It got out of the premium speaker  
23 market. The high-end speaker that you see here I think was  
24 last sold in, I believe, November of 2020; but to my  
25 understanding, they are still selling other accused '885

1 products.

2 **THE COURT:** The lower end?

3 **THE WITNESS:** Correct.

4 **THE COURT:** Okay. At least that's your assumption,  
5 and they -- all right. That's helpful to know. Thank you.

6 Go ahead, Counsel.

7 **BY MS. CARIDIS:**

8 **Q.** So you talked about Google recognizing the competition  
9 between Google and Sonos internally. Are you aware of any  
10 public indications of that competition?

11 **A.** Yes, from my research and my own experience. If you go  
12 to, for example, a Best Buy store, you'll see the Google  
13 product right next to -- on the shelf to the Sonos product; and  
14 the documents in this record that I've been privileged to see  
15 talk about that as an intended strategy because of the  
16 competitive relationship of the parties.

17 **Q.** And can you -- next, turning to the next factor,  
18 GP Factor 6, can you explain what derivative or convoyed sales  
19 are?

20 **A.** Yeah. GP6 tells us to -- we need to not only look at the  
21 goods that are covered by the patents, but if you sell a  
22 patented product and that helps you to generate other  
23 revenue -- a classic example would be you sell spare parts or  
24 the old, if you sell the razor, you're going to sell the  
25 blades -- well, in this case we have the same.

1 That part of Google's strategy is to capture the home by  
2 putting out products into the marketplace because that allows  
3 them to then generate advertising revenue, data revenue, and  
4 other significant economic results from having these products.

5 **Q.** And so what impact, if any, does *Georgia-Pacific* Factor  
6 Number 6 have in this case?

7 **A.** Two impacts. And the bottom line is, it suggests that the  
8 royalty rate would be higher if you're basing the royalty only  
9 on the number of directly accused units; and then  
10 qualitatively, it helps us to understand some of the accounting  
11 information, which may show lower profits on the accused units  
12 because they make it up on other products.

13 **Q.** Let's turn to the next factor, GP Factor Number 7. Can  
14 you explain this factor and what effect it has on the  
15 hypothetical negotiation?

16 **A.** This one is simple. It talks about whether the  
17 negotiation is for a long time or a short period of time. This  
18 is one of those happy-in-the-middle factors. It really doesn't  
19 make a significant difference. Google's expert agrees. We can  
20 skip this one.

21 **Q.** Okay. Without advancing the slide, can you explain what  
22 GP Factor Number 8 is?

23 **A.** GP factor 8 talks about the profitability and commercial  
24 success of the accused products, and this speaks generally to  
25 what I just referenced; that we look to see if Google is

1 successful in selling the products at issue or if they're  
2 giving them away, what's the economic impact to them for that.

3 And what I found in my research is that there are other  
4 significant benefits to Google from the products that are  
5 accused aside from what the basic accounting information would  
6 tell you.

7 **Q.** And, again, without going into any numbers, can you just  
8 give a little bit more description of the profitability of the  
9 products at issue in this case?

10 **A.** So in -- these products are often what we considered a  
11 loss leader. So they can be sold at an amount that doesn't  
12 generate a net profit. And so to understand why Google would  
13 do that, it is in order to capture that home, to be able to  
14 then deliver those advertisements and to collect that data. So  
15 that's part of the strategy of this business.

16 **Q.** So moving to your final column of your *Georgia-Pacific*  
17 factors, which are 9 and 10, can you describe what Factors 9  
18 and 10 contemplate?

19 **A.** Yes. They relate to the technical benefits of old modes  
20 or devices, the real value of the invention.

21 And in this case what I show on the screen is essentially  
22 an excerpt from Dr. Almeroth's report. I rely upon him for the  
23 technical features of this product. We heard his testimony  
24 this week.

25 **Q.** And do Google's proposed noninfringing alternatives impact

1 *Georgia-Pacific* Factors 9 and 10 in this case?

2 **A.** They do. If Google had alternatives they could advance,  
3 they would suggest that, therefore, the benefits of these  
4 patents are lower.

5 And as we've already talked about and as you heard from  
6 Dr. Almeroth, there are no alternatives that Google can offer  
7 or is, in fact, offering that are noninfringing and  
8 commercially acceptable according to Dr. Almeroth.

9 **Q.** And were you -- did you also see the video deposition  
10 clips that were played several days ago relating to those  
11 alternatives?

12 **A.** I did, yes.

13 **MS. CARIDIS:** Your Honor, permission to play two short  
14 video clips from the deposition designations that were played  
15 for the jury on Wednesday.

16 **THE COURT:** Go ahead.

17 **MS. CARIDIS:** Mr. Jay, can you please play  
18 Mr. Shekel's deposition at page 99, lines 9 through 16?

19 (Video was played but not reported.)

20 **MS. CARIDIS:** Mr. Jay, can you please play  
21 Mr. Shekel's deposition at page 109, line 12 through line 19?

22 (Video was played but not reported.)

23 **BY MS. CARIDIS:**

24 **Q.** Mr. Malackowski, you understand that the video clips that  
25 we just saw were of a Google engineer discussing Google's



1 alleged noninfringing alternatives; right?

2 **A.** That's my understanding. A senior engineer.

3 **Q.** And what do you take away from his testimony as it relates  
4 to *Georgia-Pacific* Factors 9 and 10?

5 **A.** So I evaluate this in the context of the larger record  
6 understanding that Google goes through tremendous research to  
7 understand what to deliver to their customers and that every  
8 feature is important to them.

9 This speaks directly to what would happen at the  
10 negotiation. If Google came to the negotiation or their expert  
11 said, "Well, we could do this or that," Sonos would say, "Well,  
12 wait a minute. Your senior engineer specifically looked at  
13 that and said it would be a poor consumer experience. That's  
14 not commercially acceptable so you do have to pay us a fair  
15 rate because it's important."

16 **Q.** So then summing up, what conclusion do you come to with  
17 respect to *Georgia-Pacific* Factors 9 and 10?

18 **A.** That they should point to a higher royalty relative to the  
19 benchmark.

20 **Q.** And what is the next relevant factor to the hypothetical  
21 negotiation?

22 **A.** It's one I mentioned at the very beginning. GP11 talks  
23 about the extent and benefit of the invention. And you  
24 remember earlier I said one way to determine that is by the  
25 extent of use or whether or not they promote the invention.

1 And so in my work, I went back to look through the Google  
2 marketing documents; and what's shown on the screen, Slide 34,  
3 is that Google did, in fact, promote this room -- this room  
4 grouping feature to its customers.

5 You can see in the left side an example of "Let's play  
6 party play list on my speakers. Let's move from room to room."

7 And then on the right side they actually give the consumer  
8 instructions of how to set up the groups that are accused.

9 Q. And how does that affect the outcome of the hypothetical  
10 negotiation?

11 A. It points to a higher rate.

12 Q. Can you explain to me what *Georgia-Pacific* Factor 12 is?

13 A. Yes. *Georgia-Pacific* Factor 12 is an important factor  
14 with respect to these benchmarks.

15 You remember GP1 says let's look to the Google license --  
16 I mean, the Sonos licenses for benchmarks. GP2 says let's look  
17 to the Google licenses for benchmarks. GP12 says let's look to  
18 analogous inventions in an analogous business.

19 So it's teaching me as an expert: Put patent acquisitions  
20 and patent licensing aside. You need to do a broader, more  
21 in-depth search, and so I did. I looked to see if there were  
22 other technologies that would provide a similar benefit, and I  
23 looked to see if there was a nexus between those technologies  
24 in both the benefits and the parties here. So I did -- I was  
25 able to find that actually.

1 Q. And what did you find?

2 A. So if you go to Slide 12, this will be the third slide I  
3 tell you is really important because it's a great, in my  
4 opinion, benchmark for GP Factor 12 as opposed to GP1 and 2.

5 THE COURT: All right. Before we get started, in your  
6 notes you should make a note or an asterisk that there is a  
7 contention in this case and I will have to make a ruling about  
8 IFTTT. I haven't made the ruling yet, but one side or the  
9 other wants me to exclude all of the testimony of this witness  
10 concerning IFTTT.

11 I don't need to get into the reasons for that now, but I  
12 don't -- if we come to that, I want you to be able to sever and  
13 delete that from your analysis over there in the jury box. So  
14 draw a line or an asterisk or something.

15 I'm not saying that we're going to do that. I'm saying it  
16 might happen, and I want you to be able to adjust it if it  
17 does.

18 So I'm sorry for the interruption, but please go ahead and  
19 the floor is yours with respect to IFTTT.

20 MS. CARIDIS: Thank you.

21 BY MS. CARIDIS:

22 Q. Mr. Malackowski, can you explain to the jury what IFTTT is  
23 capable of?

24 A. Yes. So first to put it in context, what are we trying to  
25 do? We're looking for technology that allows you to group

1 speakers. We have a range of options for that, and the jury's  
2 has already seen this.

3 The first option is people can cut holes in the walls and  
4 run wires and connect them. The other option is the  
5 sophisticated technology of the patents in suit with integrated  
6 software, but there are things in between; and in between one  
7 of those options that's very close, as we'll see, to the  
8 patents in suit here is an application that you put on your  
9 control device, your phone, called if this, then that, IFTTT.  
10 Not the most creative name, but it kind of gets the point  
11 across.

12 And you can download the app and you can very simply  
13 program it to group your speakers, save those groups, and  
14 invoke them later, and we heard Dr. Almeroth explain at some  
15 detail how this happened.

16 **Q.** Does IFTTT offer different levels of features?

17 **A.** They do. There are basically good, better, best options  
18 you can have for IFTTT.

19 The core plan is a free plan where you can do limited  
20 things. The pro plan costs you in this case \$2.50 each month,  
21 but you can do more sophisticated things. And then there's a  
22 pro plus where you can do custom programming.

23 As you heard Dr. Almeroth talk about yesterday, in order  
24 to group speakers to have multiple speakers in a group, you  
25 need what are called multiaction applets, which means you need

1 to have the IFTTT pro plan to be comparable.

2 But that's really helpful because it tells us -- IFTTT  
3 they say can do most anything under the sun, but those are all  
4 the free things. You know, what's the weather forecast? I use  
5 it to set the news for me.

6 But if you want to do the more advanced features that are  
7 analogous to this patent in suit, you need to pay that fee and  
8 so that's what I focused on for my work.

9 **Q.** And how many applets are needed to create overlapping zone  
10 scenes?

11 **A.** You need at least two; one for each zone scene and if they  
12 share a speaker, they would overlap. Now, many customers are  
13 going to create many more than two. I create more than two,  
14 but you need at least two to have that overlap.

15 **Q.** And so does the IFTTT multiaction applets that you're  
16 talking about, do they satisfy all of the functionality of the  
17 asserted patents?

18 **A.** Good question because they don't. They are not quite as  
19 good.

20 So one of the considerations I had was to look at the  
21 capability of the Sonos patents in suit, as I understood from  
22 Dr. Almeroth and the record; look at the capability of IFTTT,  
23 also as I understood from Dr. Almeroth and the record; and you  
24 can see both create predefined speaker groups. Both can save  
25 predefined speaker groups. Both allow you to invoke predefined

1 speaker groups at a later time. Both allow you to name the  
2 predefined speaker group to a common theme, such as morning,  
3 evening. Both allow you to have predefined speaker groups that  
4 will overlap.

5 And the difference that I found is that the  
6 synchronization for IFTTT is not the same, not as good as what  
7 the Sonos technology is.

8 So as a damages expert what that tells me is my benchmark  
9 of \$2.50 that I'm starting with, that's probably a little low  
10 because it doesn't have all the features; but it certainly, in  
11 my opinion, is comparable and it's exactly the type of thing  
12 that I believe *Georgia-Pacific* 12 looks for.

13 **Q.** And so what is the value that consumers are willing to pay  
14 for IFTTT?

15 **A.** So it varies. IFTTT was -- I'm just going to call it  
16 IFTTT. IFTTT was a startup. So they started giving it away  
17 for free. Eventually they began to charge.

18 As I show on the next slide, Slide 39, it was really  
19 interesting, this is kind of a -- I guess a tech thing, they  
20 let you set your own price. They thought it would be worth  
21 9.99 a month, but you could pick a lower price -- frankly, I  
22 don't know who wouldn't -- but it couldn't go below \$1.99.

23 So in this negotiation when Google and Sonos are talking  
24 about what this type of technology is worth, Google is going to  
25 say, "Look you, know, if anything, it's got to be the lowest

1 price possible." So I used -- I started with the \$1.99 for my  
2 analysis.

3 Q. And just so we're clear, the \$1.99 that you're using as  
4 indicated in Slide 39 is for the pro version and -- is for the  
5 pro version that you are paying for in order to get multiaction  
6 applets; correct?

7 A. Yes. That is what's required to be comparable to this  
8 invention.

9 Q. So, then, why is the value that a consumer, like yourself,  
10 would pay to IFTTT relevant to the amount Google would pay  
11 Sonos in a hypothetical negotiation?

12 A. Well, it's obviously a key question; right?

13 Google in licenses technology -- or acquires technology to  
14 provide to their customers. That's the entirety of their  
15 business, and you see that substantially with the app platform.  
16 They'll allow technology innovators to put the apps on their  
17 platform, not because Google people get excited about it --  
18 they probably do -- but because consumers can then access that.  
19 And consumers pay a fee in many cases for those apps, and then  
20 Google keeps part of the fee as its business model.

21 So I'm not saying that Google would pay Sonos 1.99 because  
22 that's what customers pay; but what I'm saying is Google would  
23 begin to figure out how much of that 1.99 they could keep for  
24 themselves, and that's what's informing of a royalty.

25 And as you'll see, we're going to go way down from 1.99.

1 That's just where we're starting.

2 Q. So I think you stated that the 1.99 is a monthly fee, and  
3 we can see that on the screen here; right?

4 A. Yes.

5 Q. So is it your assumption that Sonos charges Google a  
6 monthly fee as well?

7 A. Well, I certainly thought about that. And Sonos would  
8 definitely like to charge a monthly fee because those numbers  
9 would become significant, but Google would push back and Google  
10 would say "That's not custom and practice in the industry.  
11 When we look at the Lenbrook agreement or other agreements,  
12 you're not charging these people monthly."

13 And so the next thing that I did is I determined what  
14 would be a reasonable one-time payment per device starting with  
15 this monthly analysis, and the way that I did that is looked to  
16 the average life of these products.

17 Now, speakers can last a decade -- I have Sonos speakers  
18 that are older than my kids -- but smartphones don't last very  
19 long, a couple of years. And so what I said is to be  
20 conservative, to work in Google's benefit, let's just assume  
21 the monthly fee is only going to last two and a half years, and  
22 it'll be okay that speakers last longer. And so what is the  
23 value today of paying 1.99 per month for two and a half years  
24 discounted back? And that's how I began the analysis.

25 Q. Has IFTTT always charged a fee for its services?



1   **A.**   No.  As I indicated, they started giving it away for free.  
2   They always knew they were going to charge a fee, but they were  
3   trying to build an audience.

4           **THE COURT:**  What did they charge in November of 2020  
5   and whatever the relevant dates were again?

6           **THE WITNESS:**  I believe, Your Honor, right at that  
7   time they started charging the pro fee; but to your question,  
8   it's really important, if you go back to the first negotiation  
9   a year earlier, it was free at that time.

10   **BY MS. CARIDIS:**

11   **Q.**   And so if it was free at the time of the first  
12   hypothetical negotiation, how are you able to use that price in  
13   your analysis here?

14   **A.**   Fair, good question.

15           So two things.  One is, the point of a *Georgia-Pacific*  
16   analysis, one of the factors calls you to specifically look at  
17   the term of the license, what's expected to happen over the  
18   next years while the patent's valid.  So they would sit down  
19   and say:  Well, even if IFTTT gives it away for free today  
20   because they're trying to build an audience, A, is that  
21   comparable to Google because Google has an audience?  And, B,  
22   would they do that for the rest of their business without any  
23   ad support?  And of course they wouldn't.  They're not in the  
24   business to give it away free.

25           So in my opinion as an expert, the parties would consider

1 the economic value that IFTTT would be charging as a starting  
2 point for comparable.

3 Q. Speaking of the economic value of IFTTT, did you account  
4 for the fact that IFTTT can do more than just group speakers?

5 A. Yes. In two ways. One, remember the free version does  
6 all kinds of things that are one-step apps and they'll turn on  
7 my lights, all that's free. I don't count for that at all  
8 because the pro plan is only charging you for those enhanced  
9 features like the multistep apps. So we're already pushing  
10 aside all of the simple stuff.

11 And then, second, the pro plan uses -- allows for 20 apps  
12 for \$2.50. I'm only going to take two applets because that's  
13 the minimum that's needed to invoke the invention, even though  
14 I recognize that many users have more than two groups, but that  
15 would be to Google's benefit. So I'll essentially reduce my  
16 starting point by 10 percent, 2 out of 20.

17 Q. You reduce your starting point by 10 percent or to  
18 10 percent?

19 A. To 10 percent. I'm sorry. I reduce it by 90 percent.

20 Q. Did you apportion the IFTTT value calculations in any  
21 other way?

22 A. Yes. The other thing that I thought about is: Well,  
23 Google might say, "Yeah, this is an infringement every time  
24 it's put on a phone or speaker, but not everybody has a lot of  
25 speakers in a group. How do you account for that?"

1 And so I did more research, and I found that there is data  
2 showing, both within Sonos and publicly, that only about  
3 29 percent of households who have speakers have multiple  
4 speakers.

5 So I reduced it by another 70 percent. So I took the  
6 lowest price, cut it by 90 percent, cut it by 70 percent, cut  
7 it by two and a half years as opposed to a lifetime.

8 **Q.** From an economics -- from a perspective of your economic  
9 analysis, does it matter how often those households actually  
10 group speakers?

11 **A.** No. The benefit of the invention is you usually group  
12 once, play many times. You group and you save, and then you  
13 can invoke the groups on a daily basis or as often as you like.  
14 You don't need to regroup every time.

15 **Q.** Nevertheless, are you aware of any data showing that the  
16 accused Google speakers here have been configured into groups?

17 **A.** Yes. One of the documents that the Google expert points  
18 to is there is for a limited period of time some Google  
19 information that shows how this was actually used, but it  
20 doesn't show how often they invoke it. Just how it was  
21 grouped. So I don't think it's relevant to the calculation.

22 **THE COURT:** And the "it" you're referring how -- "it"  
23 was used, you mean IFTTT or --

24 **THE WITNESS:** Grouping speakers, Your Honor, the  
25 infringement.

1           **THE COURT:** All right. So you're talking about the --  
2 what's the alleged invention as opposed to IFTTT.

3           **THE WITNESS:** Correct.

4           **THE COURT:** Okay.

5           **BY MS. CARIDIS:**

6           **Q.** So I believe earlier you mentioned that you convert the  
7 monthly IFTTT rate to a per-device rate. Can you kind of  
8 describe what calculations you did to get between those two  
9 points?

10          **A.** Yes. So it's a spreadsheet where I show the monthly data  
11 by patent. We then bring it back to present value. And so the  
12 bottom line conclusion is for the '966 patent, the per-unit  
13 rate before we start these sharing and apportionments would be  
14 \$4.04; and for the '885 patent, the per-unit rate would be  
15 \$4.27.

16          **Q.** And can you just describe the present value factor that  
17 you have on the screen here?

18          **A.** Yes. I went back to the date of each hypothetical  
19 negotiation, and I found what's called a discount rate. It's a  
20 dollar in the future is worth than less than a dollar today.  
21 So we discount those amounts back to the date of hypothetical  
22 using the weighted average cost of capital of Google.

23          **Q.** And then what did you do after getting to these discounted  
24 IFTTT prices?

25          **A.** Then I took into account the households that have multiple

1 speakers. So this is one of those chalkboard charts where the  
2 numbers are important.

3 So ultimately I believe that one of the factors that would  
4 go into the hypothetical negotiation would be the  
5 *Georgia-Pacific* Indicator Number 12 of \$1.17 for the '966  
6 patent and \$1.24 for the '885 patent, and that's what would be  
7 negotiated between the parties of how far they would share it.

8 **Q.** Let's review. We went through a lot of numbers. There's  
9 a lot of things on the screen. Can we just review the steps  
10 and explain what they are and if they favor Google or Sonos in  
11 each of your steps of apportionment here?

12 **A.** I prepared a summary of that.

13 So the first thing is we have to pick a subscription  
14 price, and I picked the lowest one that was available, \$1.99  
15 per month. So that would be in Google's favor.

16 Second, is although that gets you 20 applets and many  
17 people might use all 20, I said the minimum required to invoke  
18 the invention is 2 so I reduced by 90 percent, 10 percent of 2  
19 of 20. That was in Google's favor.

20 Then I said rather than account for this for the full life  
21 of products, and speakers which can last many years, we're  
22 going to limit the economic analysis to a shorter period, two  
23 and a half years. That was in the benefit of Google.

24 And then finally I said, even though every sale would be  
25 an infringement, let's take into account the use. And only

1 about 29 percent of the households have multiple speakers that  
2 could use it, so I reduced it by another 71 percent. That was  
3 to the benefit of Google.

4 Q. Thank you.

5 So that was *Georgia-Pacific* Factor 12.

6 Why don't we turn to the next *Georgia-Pacific* factor, and  
7 can you tell us what that is?

8 A. *Georgia-Pacific* Factor 13 talks about that sharing, how  
9 would they share those indicators; or going back to  
10 *Georgia-Pacific* 1, how would they share the royalty rates that  
11 they saw.

12 And in the Google records there are literally thousands,  
13 tens of thousands, of applications that are on the Google  
14 platform that if their revenue bearing followed this procedure,  
15 that 70 percent goes to the innovator, 30 percent goes to  
16 Google. And I believe the same would apply here, so I used  
17 that sharing principle.

18 Q. Turning to GP Factor Number 14, I believe you've mentioned  
19 this kind of throughout this morning, but did you consider  
20 the -- or rely on the opinions of other experts in this case?

21 A. Yes. Dr. Almeroth, as I've described.

22 Q. Okay. And then summing it up, can you tell us what are  
23 the most valuable inputs that would be brought to the  
24 hypothetical negotiation table?

25 A. This is the last one. So this is the good news.

1 *Georgia-Pacific* Factor 15 has us bring it all together.

2       So the key inputs for me would be we know from GP1 that it  
3 would be unit based; we know that from GP12 there are analogous  
4 inventions and analogous businesses that can be apportioned,  
5 and we know from GP9 and 10 that there's no alternatives  
6 available. So with that input, we have the sharing analysis  
7 from GP13 and that's how we ultimately would get to our  
8 royalty.

9 **Q.** And what were your conclusions regarding the  
10 *Georgia-Pacific* factors here?

11 **A.** So these are numbers you've all seen before. We start  
12 with the \$1.17 for the '966, the \$1.24 for the '885, we apply  
13 the 70/30 split, and we get a reasonable royalty per unit for  
14 the '966 of 82 cents and a reasonable royalty per unit for the  
15 '885 of 87 cents.

16 **Q.** So let's put actual dollars and cents to this framework.  
17 What is the comparable technology market price for your  
18 conclusions?

19 **A.** So if you then take these figures and you multiply it by  
20 the extent of use that we talked about -- so the final slide,  
21 so to speak -- is for the '966 patent, there are 94,606,967  
22 instances of accused infringement multiplied by 82 cents. In  
23 my opinion, the damages which this jury should award for that  
24 patent is \$77,546,923 for the period of November 5th, 2019,  
25 through September 30th, 2022.

1 Likewise, for the '885 patent, the accused units are  
2 14,133,558. The per-unit royalty would be 87 cents. The total  
3 damages would be \$12,246,294 for the period of November 24th,  
4 2020, through November 15th, 2022.

5 Q. And, Mr. Malackowski, do these reflect reasonable royalty  
6 damages in your opinion?

7 A. In my opinion, they do, both because they rigorously  
8 follow the *Georgia-Pacific* factors, they are consistent with  
9 the market approach of GP1 for the larger portfolio of or  
10 buffet; and if you look at it in the context of these products,  
11 this represents well less than 1 percent, in some cases  
12 .1 percent, of the revenues of the products at issue. So it's  
13 a very modest fee in consideration of the benefits, in my  
14 opinion.

15 Q. Thank you for your time, Mr. Malackowski.

16 MS. CARIDIS: I pass the witness.

17 THE COURT: All right. Thank you.

18 Cross-examination.

19 **CROSS-EXAMINATION**

20 BY MS. BAILY:

21 Q. Good afternoon, Mr. Malackowski.

22 A. Good afternoon.

23 Q. I believe you started your testimony by telling the jury  
24 that if there was no infringement found in this case, there  
25 would be no damages; is that right?



1 A. And I stand by that, yes, ma'am.

2 Q. All right. And it's also true that if the jury finds the  
3 patents invalid, there would be no damages in this case either;  
4 correct?

5 A. Of course.

6 Q. So if the jury finds either noninfringement or invalidity,  
7 they can disregard everything you have to say; right?

8 A. I hate the word "disregard," but they certainly wouldn't  
9 factor it into their opinions.

10 Q. Now, there are three common ways that folks in your line  
11 of work evaluate reasonable royalty damages in the context of a  
12 hypothetical negotiation; right?

13 A. I assume you're referring to the cost market and income  
14 approach?

15 Q. That's right.

16 A. Yes, ma'am.

17 Q. And in this case you used the income approach; correct?

18 A. Well, I considered all three as described in my testimony.

19 Q. Your IFTTT analysis, you considered that under the income  
20 approach in this case?

21 A. Income and market, yes.

22 Q. And the income approach attempts to value an asset by  
23 measuring the benefits derived from use of the asset; correct?

24 A. True.

25 Q. And the type of asset we are trying to value here is a

1 patent; correct?

2 A. Yes, ma'am.

3 Q. And so the income approach attempts to value a patent by  
4 measuring the benefits derived from use of the patent; correct?

5 A. Of the benefits of the technology that's protected by the  
6 patent, correct.

7 Q. Well, sir, you agree that the income approach attempts to  
8 value an asset by measuring the benefits derived from use of  
9 the asset? You just agreed with me on that; right?

10 A. And I think I'm saying the same thing. Yes, of course.

11 MS. BAILY: Let's show DDX6.1 because this is  
12 important.

13 BY MS. BAILY:

14 Q. You would agree that the income approach to coming up with  
15 a reasonable royalty in this case attempts to value a patent by  
16 measuring the benefits derived from use of the patent; right?

17 A. That's the question you just asked me. I don't disagree;  
18 but if you look up income approach in a textbook, you're going  
19 to get pages. So you're just capturing the essence of the  
20 idea. I don't dispute this.

21 Q. So in the context --

22 MS. BAILY: You can take that down, Mr. Fisher.

23 BY MS. BAILY:

24 Q. In the context of the income approach and now you say also  
25 the market approach, we've heard that you based your

1 calculation of a reasonable royalty in this case on the IFTTT  
2 app; correct?

3 **A.** In part, yes, ma'am.

4 **Q.** And you hadn't used the IFTTT app before your work on this  
5 case; correct?

6 **A.** No. I have Sonos speakers. I can group them separately.

7 **THE COURT:** I didn't hear the answer. Is the answer  
8 yes or no?

9 **THE WITNESS:** No, I did not. I don't --

10 **THE COURT:** All right.

11 **BY MS. BAILY:**

12 **Q.** And you didn't learn about the IFTTT app from Sonos;  
13 right?

14 **A.** That was my independent research. No, correct.

15 **Q.** Nobody at Sonos told you that Sonos relies on the IFTTT  
16 app to negotiate license agreements in the real world? Nobody  
17 from Sonos told you that; right?

18 **A.** No. You wouldn't expect that, ma'am.

19 **Q.** Now let's look at how the IFTTT app advertises itself.

20 **MS. BAILY:** Let's bring up DDX6.2.

21 (Pause in proceedings.)

22 **BY MS. BAILY:**

23 **Q.** Do you recognize this?

24 **A.** Yes. I think I actually quoted this in my testimony.

25 **Q.** And so this is how IFTTT presents and sells itself to the

1 world; right?

2 **A.** In part.

3 **Q.** And I think you explained this earlier, but just to make  
4 sure the jury understands, IFTTT stands for if this, then that;  
5 right?

6 **A.** Exactly.

7 **Q.** And you agree that -- I'm going to start calling it IFTTT,  
8 because it's hard to do the IFTTT.

9 You would agree that IFTTT has a wide range of  
10 capabilities and a lot flexibility; fair?

11 **A.** Yes, ma'am.

12 **Q.** And that wide range of capabilities and flexibility  
13 extends to all kinds of software and services; right?

14 **A.** I don't dispute that.

15 **Q.** And Dr. Almeroth testified yesterday that the pro version,  
16 the version you have to pay for, of IFTTT could be used in  
17 millions of different ways. Do you disagree?

18 **A.** I don't disagree. It's like, I think, the tube of glue  
19 analogy. You can use glue for a lot of things.

20 **Q.** But you agree that the pro version of IFTTT can be used  
21 for millions of different purposes; correct?

22 **A.** Conceptually theoretically, yes.

23 **Q.** If you pay for the pro version, you can write what are  
24 called applets in the form of if this, then that and that;  
25 right?

1 A. Exactly.

2 Q. And so you're paying for the ability to not just do if  
3 this then, that but to do instead if this, then that and that;  
4 right?

5 A. And that and that, the multistep function.

6 Q. And so with the pro version of IFTTT, you could build an  
7 applet to use on your vacation, say, and you can say "If I take  
8 a picture, then I will -- then post it to my travel blog and  
9 post it to my Instagram"?

10 A. Sure.

11 Q. And then when you get home from vacation and you're back  
12 at work, you can change your applet and you can change it to  
13 say "If it's 7:00 a.m., then trigger an alarm on my phone and  
14 send me a notification from my calendar to tell me when my  
15 first meeting is"? That's another example; right?

16 A. Or program a new applet, sure.

17 Q. And then a month later you can change your applet again,  
18 and you can just do something fun. You can make it so if the  
19 space station is over my house, send me a notification and send  
20 me a link to a live video from NASA; right?

21 A. Sure.

22 Q. None of these examples have anything to do with speaker  
23 grouping; correct?

24 A. They are a tool set that your particular examples do not.

25 Q. And none of these examples have anything to do with a

1 smart home; right?

2 **A.** Well, you execute the if on the smartphone. That's the  
3 control device. So I would argue they do have a lot to do with  
4 the phone.

5 **Q.** Sorry. I might have misspoken or just not have been  
6 clear. My question was actually: None of these examples have  
7 anything to do with a smart home?

8 **A.** It depends what the application is.

9 **Q.** Well, my three examples.

10 **A.** I don't know the context of your home, but I'm happy to  
11 admit that you can find three examples that don't.

12 **Q.** And so if you're interested in writing little applets like  
13 this, you can do millions of things with access to the  
14 pro version of IFTTT; right?

15 **A.** You're speaking in these broad, general numbers, millions.  
16 I don't know. You can do a lot.

17 **Q.** What Dr. Almeroth did in this case is use the pro version  
18 of the IFTTT app to make an applet where the if was pressing a  
19 button and the thens would be to play on a first speaker --  
20 play music on a first speaker and play music on a second  
21 speaker. Is that your understanding?

22 **A.** Of the first grouping he created, that would be my  
23 understanding.

24 **Q.** And you understand that Dr. Almeroth's applet does not  
25 sync the music played back by those two individual speakers?

1 Do you understand that?

2 **A.** Yes, as he and as I described today, that's one of the  
3 deficiencies of IFTTT as compared to the patented technologies.

4 **Q.** So even if you're trying to play the same song to both  
5 speakers, the songs aren't playing at the same time when you  
6 use IFTTT; right?

7 **A.** They're not in the same level of synchronization that the  
8 Sonos patents are. Dr. Almeroth expressed the technical  
9 difference. I leave that to him.

10 **Q.** Right. But just for the jury's purposes, the  
11 synchronization -- the lack of synchronization means that if  
12 you play the same song using IFTTT to two speakers, you can't  
13 listen to the music?

14 **A.** Well, it depends on the degree of synchronization. That  
15 is a limitation of the app. The patents are more valuable than  
16 IFTTT.

17 **Q.** And the limitation in IFTTT is significant, right, because  
18 if I -- if my intent is to group two speakers and I want to  
19 listen to music on two speakers and then I perform the app that  
20 Dr. Almeroth did, I'll figure out that it doesn't work? Right?

21 **A.** So you're asking me sort of a qualitative question.

22 I mean, people do think of using IFTTT to group speakers  
23 so it can be done, but there are limitations to it.

24 **Q.** Okay. Well, let's assume that a person created the  
25 applets that Dr. Almeroth created in this case thinking that

1 they were going to be able to use them to group their speakers.

2 Are you with me?

3 A. So far.

4 Q. And once they created the applets and tried it out, this  
5 person would realize that they hadn't actually grouped their  
6 speakers together; right?

7 A. Well, I would disagree. You may think it's something more  
8 technical that I'm referring to, but I think you do group the  
9 speakers.

10 Q. Well, if somebody used Dr. Almeroth's applets and tried it  
11 out, they would realize that the music isn't synced between the  
12 speakers; correct?

13 A. No. It depends on the application. If you're playing in  
14 the kitchen and then on the outdoor deck, that may work  
15 perfectly fine.

16 That's really not an issue that's relevant to me, but I  
17 think it depends upon how close the speakers are, how you set  
18 it up. There may be some noticeable difference, there may not  
19 be.

20 Q. And you just said that's not relevant to your analysis;  
21 right?

22 A. Correct, because I recognize that synchronization is not  
23 provided in IFTTT but is an additional feature of the patent.  
24 It still makes it a comparable starting point, however.

25 Q. If grouping speakers was the only thing that someone



1 wanted to do with the IFTTT app and they tried to do it with  
2 Dr. Almeroth's applets, they would be unsuccessful?

3 **A.** I disagree. I mean, one example, at Sonos I group all the  
4 bedrooms because I wake my kids up in the morning with music,  
5 and I can't hear what's playing in my daughter's room if it's  
6 slightly off from what's playing in my room. IFTTT would be a  
7 perfect application for that.

8 **Q.** If somebody -- let me ask you this: If somebody purchased  
9 a subscription to IFTTT because it's flexible and can do a lot  
10 of things, they could try to group their speakers how  
11 Dr. Almeroth did and then when they saw that the music wasn't  
12 synced, they could then use the same two applets to do  
13 something else; correct?

14 **A.** It's a tool. It's a tool with value, and they could use  
15 the tool for other purposes. I do not dispute that.

16 **Q.** And so the person might continue to pay the subscription  
17 fee for reasons totally unrelated to speaker grouping; correct?

18 **A.** Sure.

19 **Q.** And when you were doing your royalty calculation, you  
20 didn't try to figure out how many people had purchased a pro  
21 subscription from IFTTT, did you?

22 **A.** "Try to figure out" is a very broad question. I  
23 considered that issue. I can tell you what I did find if you  
24 want to know, but it's something I considered. I haven't  
25 quantitatively factored that in. I don't believe you should.

1 Q. In your view, it is irrelevant whether anyone has actually  
2 purchased a pro subscription from IFTTT; correct?

3 A. It is because they don't need it because all the Google  
4 speakers have it, as do the Sonos speakers.

5 Q. Well, for a large portion of the time that you're dealing  
6 with, Sonos speakers didn't have the patented technology.  
7 You're aware of that; right?

8 A. True.

9 Q. So they were conceived I think 15 years before the feature  
10 was actually implemented by Sonos.

11 A. True, but Sonos is one of the applets on IFTTT. So you  
12 could group your speakers before they offered the invention.

13 Q. When you were doing your royalty calculation, you didn't  
14 try to figure out if anyone besides Dr. Almeroth had ever used  
15 the IFTTT app in the way Dr. Almeroth did; correct?

16 A. Correct. That would not be relevant, in my view.

17 Q. That's not relevant in your view?

18 A. True.

19 Q. And so even though your opinions are based on a consumer's  
20 willingness to pay for IFTTT, you've never actually determined  
21 whether anyone has paid for IFTTT; correct?

22 A. I've looked into that information. I know people have  
23 actually paid for IFTTT, hundreds of thousands of people. I  
24 can't tell you they've specifically used it for grouping  
25 speakers. We can see on forums that people talk about using

1 IFTTT for grouping speakers, but I haven't called them. I  
2 don't know who they are. That's all true.

3 Q. Everything that you just said you looked into well after  
4 proffering your opinions and doing your calculations in this  
5 case; correct?

6 A. In response to the Google's expert's critique, yes, ma'am.  
7 It was my follow-up.

8 Q. I'm going to switch gears for a minute and we're going to  
9 come back to IFTTT. I'm going to switch gears.

10 When you were doing your calculations, your understanding  
11 was that the patents in this case provided a new way of  
12 grouping networked media players, such as smart speakers,  
13 together for synchronous playback of media; correct?

14 A. I would agree with that.

15 Q. So you understood that the patents are about one way of  
16 grouping speakers?

17 A. Sure.

18 Q. But you didn't take into account any usage metrics for  
19 grouping in your royalty calculations for the patents; correct?

20 A. I don't understand that question. All of the accused  
21 units is a metric of the grouping or capability of grouping.  
22 So maybe I don't understand your question.

23 MS. BAILY: Let's play the deposition at 244:16 to  
24 244:19.

25 (Video was played but not reported.)

1           **THE COURT:** Louder.

2                   (Video was played but not reported.)

3           **BY MS. BAILY:**

4           **Q.** And what that means is that you did not take into account  
5 how many people in the real world actually group their  
6 speakers; correct?

7           **A.** I did not mathematically know the actual number. I took  
8 into account the number of people who could through the  
9 70 percent reduction, but I think that's -- your question is  
10 fair.

11           **Q.** Well, and to that 70 percent reduction, you agree that  
12 even people who have many speakers don't necessarily group  
13 them; right?

14           **A.** I do.

15           **Q.** And there are a lot of things that people do with their  
16 speakers that have nothing to do with grouping; correct?

17           **A.** Sure.

18           **Q.** You can play music on a speaker without grouping it;  
19 right?

20           **A.** Of course.

21           **Q.** You can set a timer that has nothing to do with grouping?

22           **A.** On certain speakers you can.

23           **Q.** You can say "Hey, Google" or "Hey, Alexa" and ask what the  
24 weather will be tomorrow without grouping your speakers;  
25 correct?

1 A. Yes, ma'am.

2 Q. You can use audio apps like the Disney storytelling app  
3 without grouping; correct?

4 A. Yes, ma'am.

5 Q. And none of that has anything to do with the patents  
6 because the patents are about a specific way of grouping. You  
7 agree?

8 A. Well, it depends. If the functionality is within each of  
9 those speakers in your example, they do have something to do  
10 with the patents because they're infringing devices; but the  
11 particular use case that you cited would not invoke a use  
12 method, as I understand it, of the patents in suit.

13 Q. Just to be clear, in this case you have assessed a royalty  
14 on a single speaker that has never been grouped with any other  
15 speaker with the Home app; right?

16 A. I am required to assess a royalty on each and every  
17 infringement. I do take into account that in many cases that  
18 won't be used, that's the 70 percent reduction, but there is a  
19 minimum measure of damage for each instance of infringement.

20 Q. Your reduction has nothing to do with the use of grouping  
21 because you agree that even people who have many speakers don't  
22 necessarily group them; right?

23 A. Those aren't inconsistent. It does have to do with  
24 grouping because you can't group if you don't have multiple  
25 speakers, but I also agree with you that some people have

1 multiple speakers and don't group.

2 **Q.** As another example, you're assessing a royalty on somebody  
3 with an Apple phone that has a Google Home app but no speakers  
4 at all?

5 **A.** Yes. That is an infringing device that would have  
6 benefits because you have the option of using it in the future.  
7 I take into account the fact that not everybody uses it, but it  
8 would require a royalty.

9 **THE COURT:** All right. I need to tell the jury, this  
10 is an important point that I may give you later an instruction  
11 on whether or not what the witness just said is true as to  
12 whether or not it -- a phone by itself untethered to any  
13 speaker is infringing.

14 That's an important issue in this case. I'm not yet ready  
15 to make a ruling. What the witness just said is in contention  
16 so keep that in mind.

17 Next point.

18 **BY MS. BAILY:**

19 **Q.** And just to be clear, you did not use usage metrics for  
20 grouping functionality in your reasonable royalty calculations  
21 for the zone scene patents?

22 **A.** I think that's true, correct.

23 **Q.** You've never -- you didn't take into account evidence from  
24 Sonos as to how many Sonos users group their speakers; correct?

25 **A.** True. My focus was on the infringement, not Sonos'

1 activity. So that's fair.

2 Q. You didn't ask Sonos to give you any information about how  
3 often speaker grouping is used; correct?

4 A. Well, that's a very broad question. I do have information  
5 that they consider it important -- they promote it, it was a  
6 key feature -- but I don't incorporate any statistics because  
7 I'm focused on Google's use.

8 Q. You didn't do a survey of people who own three or more  
9 speakers to see how many of them group their speakers?

10 A. Of course not.

11 Q. You've seen surveys like that done in other patent cases  
12 you've been involved in; right?

13 A. There is survey evidence, for example, from Google in this  
14 case. So, sure, it's not infrequent to see surveys.

15 Q. But you didn't do a survey here?

16 A. I did not.

17 Q. And in this case I think you've mentioned that you're  
18 aware that Google produced usage metrics regarding its grouping  
19 functionality; correct?

20 A. I mentioned that in my direct. It was for a limited  
21 period of time. I don't believe it would be applicable to the  
22 analysis, but there is some data showing actual infringement.

23 Q. You're aware that Google produced usage metrics regarding  
24 its grouping functionality?

25 A. I think that's the same question. Yes, of course. Same

1 answer.

2 Q. You didn't take that information into account when you  
3 calculated your royalty?

4 A. No, I don't believe that would be a proper measure for all  
5 the reasons I discussed today.

6 Q. Just to be clear, you also didn't try to figure out how  
7 many people group their speakers in the way that is actually  
8 described by the patent; correct?

9 A. As I understand your question, you're asking me about  
10 infringement and I'm assuming infringement. So, no, that's not  
11 a separate analysis that I did.

12 Q. That wasn't quite my question. You didn't try to figure  
13 out how many people actually group their speakers in the way  
14 that is described in the patents?

15 A. I don't believe that data is available.

16 Q. You understand that some types of speaker grouping are not  
17 covered by the patents; correct?

18 A. Yes, ma'am.

19 Q. I want to talk just for a few minutes about the Home app.

20 A. Okay.

21 Q. There are a lot of things you can do with the Google Home  
22 app; correct?

23 A. There are.

24 Q. A lot of them have nothing to do with speakers?

25 A. I agree.



1 Q. You can control your lights?

2 A. Yes, ma'am.

3 Q. You can control your thermostat?

4 A. I personally do.

5 Q. You can control your oven?

6 A. I'm sure. That one I haven't done, but I'm presuming you  
7 can.

8 Q. You can control your outdoor cameras?

9 A. Yes.

10 Q. And you would agree that there are many people who  
11 download the Home app onto their phone who do not have even one  
12 speaker?

13 A. I suppose that is true.

14 Q. And you didn't try to estimate how many people who have  
15 the Home app on their phone actually use it to group three or  
16 more speakers; correct?

17 A. Only to the extent of at the negotiation looking at the  
18 infringing base and adjusting it downward by that 70 percent  
19 factor. That would be what would be examined in a go-forward  
20 hypothetical, and I think that would be a reasonable  
21 conclusion.

22 Q. After -- after you did your IFTTT analysis, you came to a  
23 number; right?

24 A. Yes, ma'am.

25 Q. And you split the results with 70 percent going to Sonos

1 and 30 percent going to Google?

2 **A.** Correct.

3 **Q.** And to arrive at that split you relied on the Google Play  
4 Store service fees; right?

5 **A.** Generally, yes.

6 **Q.** And the Google Play Store is a marketplace where app  
7 developers sell their products; right?

8 **A.** Exactly.

9 **Q.** And when an app developer is successful in selling a  
10 product, he keeps 70 percent of the revenue; right?

11 **A.** Sure, exactly.

12 **Q.** And the app developer pays 30 percent to Google for the  
13 use of Google's infrastructure, like the billing system; right?

14 **A.** Yes, ma'am.

15 **Q.** So that 30 percent is like a commission; right?

16 **A.** It's a sharing revenue share by commission. I have no  
17 objection to that term.

18 **Q.** Now, in the Google Play Store context, the app developer  
19 is not licensing a patent to Google; correct?

20 **A.** Well, that's a very complex question. There are  
21 agreements that discuss the intellectual property transfer  
22 between those, I've studied that, but it's not a bare patent  
23 nonexclusive license like we have here, that is true.

24 **Q.** Google is not licensing a patent to the app developer in  
25 the context of the Google Play Store; correct?

1 A. I actually think that's incorrect. I think part of the  
2 app distribution agreement provides the developer with a  
3 limited license to certain technologies.

4 Q. Well, you would agree that when Google is taking a  
5 commission in the Google app store, Google is getting paid for  
6 the use of its infrastructure; right?

7 A. In some parts, sure.

8 Q. And you looked at several agreements where Google  
9 purchased or received a license to one or more patents; right?

10 A. Yes, some of which I discussed earlier today.

11 Q. All of those agreements were lump-sum payments; correct?

12 A. And all NPEs, yes.

13 Q. There was no reference in any of those agreements to  
14 running royalties with a 70/30 split; correct?

15 A. Well, of course. They were all lump sums.

16 Q. And there was no evidence that you cited that any of those  
17 lump sums were determined with reference to a 70/30 split of  
18 revenue from products; correct?

19 A. By definition, because you're dealing with a nonpracticing  
20 entity, they're not making product to share revenue on. So,  
21 no, you wouldn't see that.

22 Q. But Google is making a product; right?

23 A. Not necessarily through those patent licenses. There's no  
24 evidence to suggest that those were all then put on the app  
25 store and sold.

1 Q. Well, let's get at it this way: In the hypothetical  
2 negotiation with Sonos, Google is the one making the accused  
3 products; right?

4 A. Yes.

5 Q. And if Google succeeds in making sales, then Sonos will  
6 get a royalty under your analysis; right?

7 A. Yes.

8 Q. And when you are evaluating the split between the licensee  
9 and the licensor under *Georgia-Pacific* 13, the split is  
10 supposed to have the twin effects of giving the licensor  
11 reasonable compensation for the use of its intellectual  
12 property and the licensee reasonable compensation for assuming  
13 the business risks associated with developing, making,  
14 promoting, and selling the product that embodies the particular  
15 technology?

16 A. The specific risk associated with adding this technology,  
17 I agree with that, which is de minimis in this case.

18 Q. Let's just put up your report at page 119.

19 (Pause in proceedings.)

20 BY MS. BAILY:

21 Q. You see it says this is -- this is something you wrote;  
22 right, sir?

23 A. Yes, sir -- yes, ma'am. Sorry. Excuse me.

24 Q. And it says (as read):

25 "The split has the twin effects of giving the

1       licensor reasonable compensation for the use of its  
2       intellectual property and the licensee reasonable  
3       compensation for assuming the business risks associated  
4       with developing, manufacturing, promoting, and selling the  
5       product that embodies the particular technology."

6       Right?

7       **A.** Absolutely. That's what I just said. Then I go on to  
8       explain how that applies in this case.

9       **Q.** In the app store, the app developer is making and selling  
10      the product and assuming the business risk; right?

11      **A.** The innovator, yes.

12      **Q.** And in the app store, the app gets -- the app developer  
13      gets the 70 percent; right?

14      **A.** The innovator. Same here.

15      **Q.** The app developer who takes on the business --

16               **THE COURT:** You need to -- you're arguing with -- in  
17      every answer you give, you argue. She's entitled in  
18      cross-examination -- as you know from many times in court,  
19      she's entitled to get a fair and square answer yes or no  
20      instead of an argument with each question.

21              Ask that question again, and this time say yes or no. Ask  
22      it again, Ms. Baily.

23      **BY MS. BAILY:**

24      **Q.** In the app store, the app developer is the one making and  
25      selling the product and assuming the business risk; right?

1 A. Yes.

2 Q. And the app developer gets 70 percent of the split of  
3 revenue; correct?

4 A. Yes.

5 Q. And in the hypothetical negotiation, Google is making and  
6 selling the products and assuming the business risk; correct?

7 A. Both parties are. So I can't say yes or no; but Google  
8 does, yes.

9 Q. In the hypothetical negotiation, all Sonos is doing is  
10 licensing its patents; correct?

11 A. But they had to develop the technology so it's more than  
12 just -- they're taking a risk to develop the innovation as  
13 well.

14 Q. Sonos didn't have to develop any technology; correct?  
15 Sonos could still have a patent and license it?

16 A. I don't agree with that. You have to reduce the invention  
17 to practice to get a patent. You have to --

18 THE COURT: What she's saying is that in the -- well,  
19 what the law requires under *Georgia-Pacific* is a license  
20 negotiation for the patented technology to Google from Sonos.

21 THE WITNESS: I agree with that.

22 THE COURT: All right. And then Google turns around  
23 and uses that as part of whatever this app is called. What's  
24 it called? The Home app, the one that does the speakers?

25 MS. BAILY: The Home app.

1           **THE COURT:** But doesn't it have name, like speakers or  
2 something?

3           **MS. BAILY:** No. It's just the Google Home app because  
4 it does all kinds of things.

5           **THE COURT:** Well, anyway, who wrote that app?

6           **THE WITNESS:** Google wrote the app in this case as the  
7 infrastructure.

8           **THE COURT:** Okay.

9           All right. So what she's trying to say is Google wrote  
10 the app. Part of that app, arguably, uses the technology, and  
11 you're assuming that it does -- and that is the assumption you  
12 should make -- and -- but the law requires a royalty between  
13 Google and Sonos but only for the license to the patented  
14 technology and not for all the other work that Google put into  
15 this feature. That's what she's trying to explore with you.

16           Am I saying it right?

17           **MS. BAILY:** Yes, Your Honor.

18           **THE COURT:** All right. Go back over that point.

19           **BY MS. BAILY:**

20           **Q.** Okay. In the context of the hypothetical negotiation,  
21 Google is the one at the hypothetical negotiation table that is  
22 making the products?

23           **A.** Yes.

24           **Q.** The speakers?

25           **A.** Yes.

1 Q. The Home app?

2 A. Yes.

3 Q. And assuming the business risk associated with selling  
4 those products; correct.

5 A. Yes.

6 Q. And in your analysis, Google is receiving 30 percent of  
7 the split?

8 A. Correct.

9 Q. In the app store, the app developer is making and selling  
10 the product and assuming the business risk; right?

11 A. They are.

12 Q. And the app developer gets 70 percent; correct?

13 A. Correct.

14 MS. BAILY: All right. You can take that down  
15 Mr. Fisher.

16 BY MS. BAILY:

17 Q. Now, you mentioned the market approach earlier; correct?

18 A. Yes, ma'am.

19 Q. And the way the market approach works is that you look at  
20 the terms of a similar license agreement and draw inferences  
21 from that to figure out what a licensor and licensee would  
22 agree to in the hypothetical negotiation. Do you agree?

23 A. It includes that, yes.

24 Q. And you did not perform any royalty calculation under the  
25 market approach in this case; right?



1 Well, I guess you say your IFTTT is under both market and  
2 income; is that your testimony?

3 A. Well, the whole -- the entire *Georgia-Pacific* analysis is  
4 under the market approach or informed by the market approach.

5 Q. Let me ask you this: You didn't calculate a royalty based  
6 on comparable similar license agreements in the real world;  
7 correct?

8 A. I did not make a mathematic calculation from those  
9 agreements.

10 Q. And you looked at the Sonos-Legrand agreement when you  
11 were coming up with your opinions in this case; correct?

12 A. Yes, ma'am.

13 Q. And Legrand paid approximately \$200,000 in royalties under  
14 that agreement; right?

15 A. That's what I understand from the prior testimony, yes.

16 Q. And your opinion is that the Sonos-Legrand agreement is  
17 not comparable to the hypothetical license that would be  
18 granted in this matter; correct?

19 A. It's informative but not fully economically comparable.

20 Q. Okay. Let's bring up your report at page 45.

21 (Pause in proceedings.)

22 BY MS. BAILY:

23 Q. Okay. And here you're talking about the Sonos-Legrand  
24 agreement, and you say (as read):

25 "Mr. Bakewell and I" --

1           You understand Mr. Bakewell is Google's damages expert in  
2 this case?

3   **A.**    I do.

4   **Q.**    And he's going to testify later in the case?

5   **A.**    Presumably.

6   **Q.**    And you say (as read):

7                   "Mr. Bakewell and I both agree that this agreement is  
8                   not comparable to the hypothetical license that would be  
9                   granted in this matter."

10           Right?

11   **A.**    True.

12   **Q.**    Okay.

13                   **MS. BAILY:** You can take that down. Thank you.

14   **BY MS. BAILY:**

15   **Q.**    You came to that conclusion because the license is a  
16 portfolio license and includes rights to a multitude of  
17 technologies not at issue in this case; right?

18   **A.**    Yes, ma'am.

19   **Q.**    And it is your opinion that from an economic perspective,  
20 a license to Sonos' entire portfolio is not economically  
21 comparable to a bare patent license that would result from the  
22 hypothetical negotiation?

23   **A.**    I agree.

24   **Q.**    You looked at the Sonos-Lenbrook license?

25   **A.**    In a similar way, yes, ma'am.

1 Q. Lenbrook paid Sonos approximately \$1.5 million under that  
2 license?

3 A. Correct.

4 Q. And it is your opinion that the Sonos-Lenbrook license is  
5 not probative of the outcome of a hypothetical negotiation in  
6 this case; correct?

7 A. In the same way, yes, ma'am.

8 Q. And you looked at the Sonos-Denon agreement?

9 A. Yes.

10 Q. And it's your opinion that this agreement is not probative  
11 of the outcome of a hypothetical negotiation in this case  
12 either; correct?

13 A. For different reasons but, yes.

14 Q. And you did not use the rates for many of these agreements  
15 in your analysis; correct?

16 A. Only as I described here today, not in the calculation.

17 THE COURT: What -- for that 70 and -- that number you  
18 came up with, how, if at all, did these agreements factor into  
19 it?

20 THE WITNESS: They are represented as a cap that the  
21 royalty could not be higher; and so as I started my analysis, I  
22 began to look not from a top-down apportionment but from a  
23 bottom-up analysis using *Georgia-Pacific* 12. So I did not take  
24 the \$30 and multiply it by 70 percent, for example.

25 THE COURT: Next question.

1 **BY MS. BAILY:**

2 **Q.** In your work on this case you also looked at several  
3 Google agreements in which Google licensed or purchased  
4 patents; correct?

5 **A.** Yes, ma'am.

6 **Q.** And those were the lump-sum agreements we talked about a  
7 bit earlier?

8 **A.** They were -- are.

9 **Q.** One of those was between Google and Outland Research;  
10 right?

11 **A.** Correct.

12 **Q.** And in that agreement, Google purchased 12 patents and 4  
13 patent applications for \$2.25 million; correct?

14 **A.** I believe that's accurate.

15 **Q.** And you're aware that Google's position is that those  
16 patents are technologically similar to the patents at issue  
17 here; right?

18 **A.** I believe they say they're partially similar, or words to  
19 that effect.

20 **Q.** You don't have a basis to disagree with Google's technical  
21 experts that the patents covered by the Outland Research  
22 agreement are technically comparable to the '885; correct?

23 **A.** So putting aside whether it's partially comparable from  
24 your last question, I would defer to Dr. Almeroth on that. I  
25 don't have an independent technical opinion.

1 Q. You're not a technical expert; correct?

2 A. Correct.

3 Q. Yesterday Dr. Almeroth did not offer any opinions at all  
4 on the Outland Research patents; right?

5 A. I believe there are -- I don't know. I don't recall him  
6 speaking to it yesterday.

7 Q. The inventor of the Outland Research patents is Louis B.  
8 Rosenberg. Do you know that?

9 A. Yeah. He's a movie producer.

10 Q. Did you see in his research that he's also a Stanford  
11 Ph.D.?

12 A. Yes. He's in the film department, I believe.

13 Q. Did you -- he's a Ph.D. from Stanford; right?

14 A. Yes.

15 Q. Okay. He also founded a company called Immersion  
16 corporation; correct?

17 A. Yes.

18 Q. And did you read anything in your research about  
19 Dr. Rosenberg, about how he has integrated his company's  
20 technology into Microsoft products?

21 A. Generally, yes. He's a prolific inventor. I'm aware of  
22 him.

23 Q. And have you read anything about how Dr. Rosenberg  
24 integrated his company's technology into Logitech products?

25 A. Generally, yes.

1 Q. And it's for the jury to decide whether the license to the  
2 Rosenberg patents is economically comparable to the  
3 hypothetical negotiation in this case; right?

4 A. Sure.

5 Q. And if the jury decides that the license to the Rosenberg  
6 patents is similar to the hypothetical license agreement here,  
7 then it would be relevant that Google paid for the Rosenberg  
8 patents with a lump sum of 2.25 million; right?

9 A. If they find it to be technically and economically  
10 comparable, it would be relevant, meaning should be considered.

11 Q. And Dr. Almeroth didn't offer any opinions on technical  
12 comparability of the Outland Research patents and the patents  
13 at issue here; right?

14 A. Not in his testimony yesterday that I recall.

15 Q. And you're not offering any technical opinions; right?

16 A. I am not.

17 Q. And so Dr. Schonfeld will testify later in this case.  
18 You're aware of that; right?

19 A. Presumably.

20 Q. And so he can give technical opinions about the  
21 relationship between the Rosenberg patents and the patents at  
22 issue in this case; right?

23 A. I'm not one to say what he can and can't do.

24 Q. The jury can credit that testimony if they so desire?

25 A. They can credit whatever they hear, of course.

1 Q. Now, you haven't calculated a reasonable royalty under the  
2 cost approach; correct?

3 A. Not a separate royalty. It was only considered in --  
4 considered in the alternatives.

5 Q. Under the cost approach, from an economic perspective, the  
6 licensee would pay no more in royalties than the cost of the  
7 noninfringing alternative; correct?

8 A. As an input into *Georgia-Pacific*, true, not as a limit to  
9 damages.

10 Q. Okay. Let's just put up your report at page 91.

11 It says under the cost approach (as read):

12 "The licensee would pay no more in royalties than the  
13 cost of a noninfringing alternative."

14 Do you see that?

15 A. Yes.

16 Q. And in this case the licensee would be Google; right?

17 A. Yes.

18 Q. And just to help the jury understand this concept of the  
19 cost approach, if a patent holder wanted to license his patents  
20 for a hundred dollars but the licensee could spend \$2 to change  
21 the way it's doing things, not infringe the patent, and still  
22 satisfy their customers, then under the cost approach, the  
23 reasonable royalty would end up being much closer to the \$2  
24 than the \$100; correct?

25 A. No necessarily. That's where you're confusing cost

1 approach with *Georgia-Pacific*. I'm happy to explain.

2 Q. Well, suffice it to say, under the cost approach, the  
3 licensee would pay no more in royalties than the cost of an  
4 noninfringing alternative; correct?

5 A. But the cost approach is not a damage calculation. It's  
6 an input to the damage calculation.

7 Q. Understood.

8 Under the cost approach, the licensee is Google; right?

9 A. Yes.

10 Q. Google would pay no more in royalties than the cost of the  
11 noninfringing alternative. Do you see that?

12 A. Under that input, yes.

13 Q. And you're aware that Google has asserted there are a  
14 variety of noninfringing alternatives in this case; correct?

15 A. Two I'm aware of.

16 Q. And you're aware that Google is going to present evidence  
17 regarding noninfringing alternatives; right?

18 A. Presumably.

19 Q. And also evidence as to whether actual consumers have  
20 accepted one of those alternatives? Google's going to present  
21 evidence of that. Did you hear that in the opening?

22 A. Yes, ma'am.

23 Q. And it's for the jury to decide if the cost approach is a  
24 reasonable way to approach damages in this case; right?

25 A. This is all within the purview of the jury so, yes.



1 Q. Now, you used the same method to determine your reasonable  
2 royalty for each of the two patents in the case; correct?

3 A. Yes, ma'am.

4 Q. And with respect to the '885 patent, Sonos --

5 MS. BAILY: Well, let's put up PDX2.21 please.

6 BY MS. BAILY:

7 Q. With respect to the '885 patent, Sonos is asking for the  
8 same royalty on each one of these products; correct?

9 A. Correct, the same per-unit royalty.

10 Q. And that's regardless of the price of these products;  
11 correct?

12 A. Correct.

13 Q. Now, are you aware of the prices of these products?

14 A. They -- yes is the answer.

15 Q. And so, for example, the Chromecast, are you aware of  
16 approximately what the price for the Chromecast is?

17 A. Less than a hundred dollars.

18 MS. BAILY: Let's go to PDX2.22.

19 (Pause in proceedings.)

20 BY MS. BAILY:

21 Q. Sonos is also asking for the same royalty on every phone,  
22 laptop, or tablet with the Home app; right?

23 A. Yes, ma'am.

24 Q. Regardless whether the product is made by Google or not;  
25 right?

1 A. So long as it's infringing, yes, ma'am.

2 Q. So if somebody has an Apple phone -- you agree Google  
3 doesn't make Apple phones; right?

4 A. Of course.

5 Q. So if somebody has an Apple phone and downloads the Google  
6 Home app, you're charging a royalty on that Apple device to  
7 Google; correct?

8 A. If it's found to infringe, yes.

9 Q. And you have reviewed information regarding unit sales in  
10 this case?

11 A. I have.

12 Q. And so you're aware that approximately 7 percent of the  
13 accused Google Home app installations in your royalty base for  
14 the '966 patent are on Google products; correct?

15 A. You're talking about the Android products, for example?  
16 What are you referring to as Google products? The Google Home  
17 app is on all of the products.

18 Q. I'm talking about the Google products. So the Google  
19 Pixel phones, the Pixel tablets, and the Google Pixel books.

20 A. I don't recall the precise number, but I'm happy to accept  
21 you represent that's what it is.

22 Q. It's a very small number of accused instances of the  
23 Google Home app that are on products made by Google; correct?

24 A. I don't have a connotation of small versus large. I  
25 accept your representation.

1           **MS. BAILY:** Your Honor, I can keep going.

2           **THE COURT:** No. It's 1:00 o'clock.

3           You're still -- you have questions you have to go?

4           **MS. BAILY:** Just a few, yes.

5           **THE COURT:** All right. Well, we're going to -- the  
6           witness will be back at Tuesday 7:30 a.m. We'll pick it up  
7           there.

8           Now, let me explain to the jury where we are. We're going  
9           to take a three-day weekend for Mother's Day and then start on  
10          Tuesday morning at the normal time.

11          I've been keeping track. The lawyers have used up getting  
12          close to two-thirds of their time. I haven't done the math  
13          yet, but so you've heard most of the case but you haven't heard  
14          it all. You haven't heard the Google side of the story except  
15          for the cross-examinations, but that's where we are.

16          I don't know. I said earlier that we might be able to  
17          send the case to you for decision on Friday. In my opinion,  
18          maybe still, but that is looking less likely now to me than --  
19          so we would then go to one of the -- I forget. I don't have it  
20          in front of me, but there was another day -- it was -- what was  
21          it? I don't want to say something without being -- I can just  
22          tell you on Tuesday. We'll -- Tuesday morning we'll give you  
23          the rest of the schedule. So that's where we are.

24          You have been very attentive, a wonderful jury. I wish I  
25          had you in every case. That would be a huge burden on you, but

1 I thank you so much for your careful attention and I look  
2 forward to seeing you here.

3 Please don't look up anything on the internet. Don't talk  
4 to your loved ones or friends about the issues in the case.  
5 Keep an open mind, and we'll -- we'll see you back here Tuesday  
6 morning at 7:45.

7 Thank you very much. Have a safe journey home.

8 **THE CLERK:** All rise for the jury.

9 (Proceedings were heard outside the presence of the jury:)

10 **THE COURT:** Okay. Be seated, please.

11 The witness can step down. Thank you for that.

12 Let's see...

13 All right. Anything to bring up with me?

14 **MR. PAK:** No, Your Honor.

15 **MR. RICHTER:** No, Your Honor.

16 **THE COURT:** All right. Let me see if I can tell you  
17 the -- for Plaintiff I have -- you have to do the math -- 537  
18 plus 37 plus 34.

19 For Defendant 49 -- no, 445 plus 42.

20 So Plaintiff has used considerably more than Defendant,  
21 but Defendant hasn't even put on its case yet.

22 **MR. RICHTER:** We are at 608 minutes, Your Honor, for  
23 Plaintiff.

24 **THE COURT:** Is that what my math comes up with? Is  
25 that what you said? 608?

1           **MR. RICHTER:** I think so.

2           **THE COURT:** From the numbers I gave you? Okay.

3           **MR. PAK:** For Defendant it looks like it's 487.

4           **THE COURT:** All right. So there we are.

5                           (Pause in proceedings.)

6           **THE COURT:** I can't remember if the witness said -- I  
7 was going to ask, but then I forget.

8           Has the witness ever used this approach IFTTT in any other  
9 case? Do we know the answer to that?

10           **MS. CARIDIS:** Your Honor, I don't know if we know the  
11 answer, but he'll be back on the stand on Monday and you're  
12 welcome to -- or on Tuesday.

13           **MS. BAILY:** He said no in his deposition.

14           **THE COURT:** What?

15           **MS. BAILY:** He said no in his deposition.

16           **THE COURT:** Okay.

17           All right. We will adjourn ourselves. I'll see you here  
18 at 7:30 on Monday morning. It's a chance I'll ask you to be  
19 here even earlier; but if I do, it would -- I said "Monday," I  
20 meant Tuesday morning. Tuesday morning.

21           And so -- now, I have a criminal case and maybe a civil  
22 case today --

23           **THE CLERK:** Just the criminal.

24           **THE COURT:** Just the criminal?

25           -- immediately so I'm going to need the -- the marshals

**PROCEEDINGS**

1 are going to need room to be on the security alert. So help me  
2 out with clearing up the courtroom. Thank you.

3 **THE CLERK:** Court is adjourned.

4 (Proceedings adjourned at 1:03 p.m.)

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CERTIFICATE OF REPORTER

I certify that the foregoing is a correct transcript  
from the record of proceedings in the above-entitled matter.

DATE: Friday, May 12, 2023



Marla F. Knox, CSR No. 14421, RPR, CRR, RMR  
United States District Court - Official Reporter